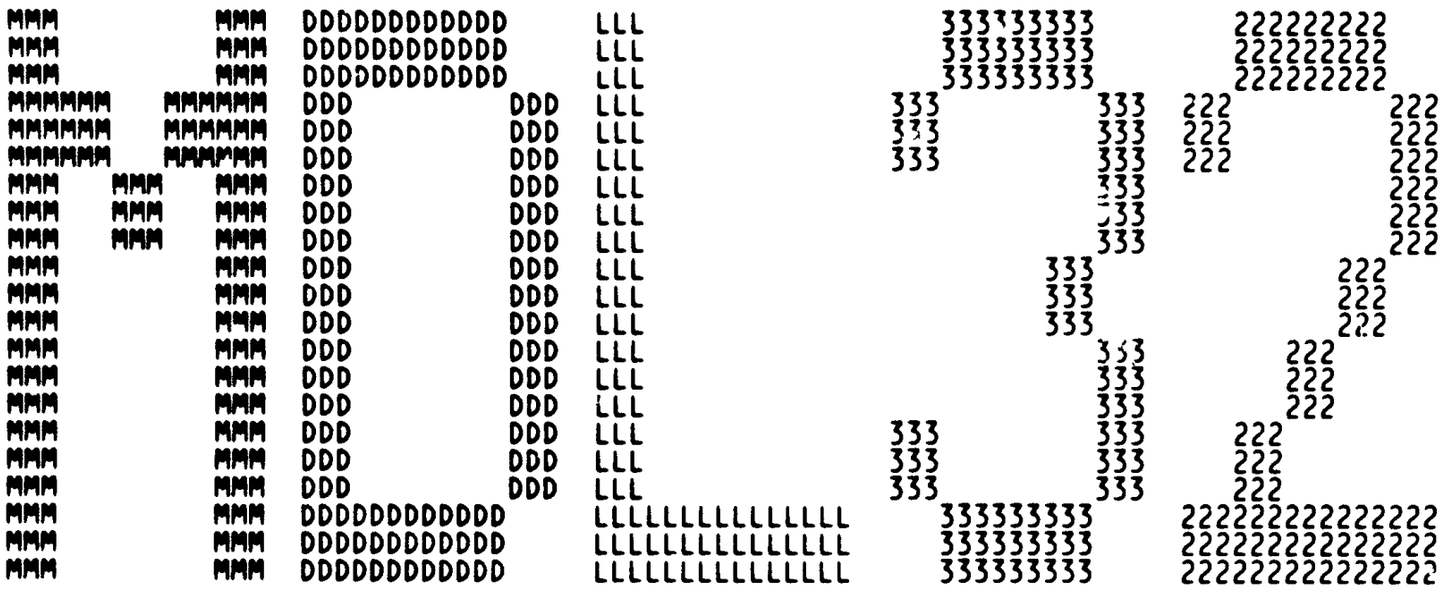
MMM MMM DDDDDDDDDDDD LLL 333333333 222222222
MMM MMM DDDDDDDDDDDD LLL 333333333 222222222
MMM MMM DDDDDDDDDDDD LLL 333333333 222222222
MMMMMM MMMMMM DDD DDD LLL 333 333 222 222
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MMM MMM DDD DDD LLL 333 333 222
MMM MMM DDD DDD LLL 333 333 222
MMM MMM DDDDDDDDDDDD LLLLLLLLLLLLLLL 333333333 222222222222222
MMM MMM DDDDDDDDDDDD LLLLLLLLLLLLLLL 333333333 222222222222222
MMM MMM DDDDDDDDDDDD LLLLLLLLLLLLLLL 333333333 222222222222222

```
MM       MM  DDDDDDDD    LL              333333      222222
MM       MM  DDDDDDDD    LL            333333      222222
MMMM   MMMM  DD       DD  LL          33       33  22       22
MMMM   MMMM  DD       DD  LL          33       33  22       22
MM  MM  MM  DD       DD  LL                   33           22
MM  MM  MM  DD       DD  LL                   33           22
MM       MM  DD       DD  LL                33           22
MM       MM  DD       DD  LL                33           22
MM       MM  DD       DD  LL                  33       22
MM       MM  DD       DD  LL                  33       22
MM       MM  DD       DD  LL          33       33    22            ....
MM       MM  DD       DD  LL          33       33    22            ....
MM       MM  DDDDDDDD    LLLLLLLLLL    333333    2222222222      ....
MM       MM  DDDDDDDD    LLLLLLLLLL    333333    2222222222      ....

LL            IIIIII      SSSSSSSS
LL            IIIIII      SSSSSSSS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II      SS
LL              II        SSSSSS
LL              II        SSSSSS
LL              II              SS
LL              II              SS
LL              II              SS
LL              II              SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

```
0001     C       Version 'V04-000'
0002     C
0003     C*****************************************************************************
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0022     C*                                                                           *
0023     C*                                                                           *
0024     C*****************************************************************************
0025     C
0026     C       REVISION HISTORY:
0027     C               23-03-77        CP      IF OUTPUTTING TO TMP FILE, JUST OUTPUT
0028     C                                       EACH LINE UNTIL THE END OF THE CONSTANT
0029     C                                       DEFINITION, THEN RETURN.
0030     C
0031     C               04-04-77        TC      SPLIT LABEL 120 INTO 121 AND 122
0032     C                                       WHICH ALLOWS LOOPING BACK TO TWO
0033     C                                       ALTERNATE POINTS (65 AND 70)
0034
0035             SUBROUTINE PCONST
0036
0037     C       THIS ROUTINE IS CALLED WHEN A LINE HAS BEEN RECOGNIZED
0038     C       AS A CONSTANT DEFINITION. THE IMPLICIT ARGUMENT
0039     C       INPTR IS THE OFFSET TO THE NEXT CHARACTER IN THE INPUT LINE.
0040
0041     C       PCONST FIRST DETERMINES WHETHER THIS IS A SINGLE CONSTANT
0042     C       DEFINITION OR A LIST OF CONSTANT DEFINITIONS. IF A SINGLE
0043     C       CONSTANT IS BEING DEFINED, THE ROUTINE PSCONS IS CALLED TO
0044     C       PROCESS THE DEFINITION.
0045
0046     C       OTHERWISE, PCONST COLLECTS THE CONSTANT PREFIX NAME, THE
0047     C       TAG, THE BASE, AND THE INCREMENT FOR THE LIST. THEN IT
0048     C       COLLECTS A CONSTANT DEFINITION AT A TIME. EACH CONSTANT
0049     C       DEFINITION CAN HAVE A NAME AND A VALUE. VALUES CAN
0050     C       BE ARBITRARILY COMPLEX EXPRESSIONS. EACH CONSTANT IS
0051     C       PROCESSED AND OUTPUT.
0052
0053     C       WHEN A SINGLE LEADING RIGHT ANGLE BRACKET IS RECOGNIZED AFTER
0054     C       A NUMBER OF CONSTANT DEFINITIONS IN A LIST, THE PROCESSING
0055     C       OF THE CONSTANT LIST IS COMPLETE.
0056
0057             INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
```

```
0159
0160            INTEGER PTR, CLNCON
0161
0162
0163    C       THE CONSTANT CAN BE DEFINED WITH A "C" OR A "K". THEY
0164    C       ARE SEMANTICALLY EQUIVALENT DEFINITIONS, BUT THE DEFAULT TAG
0165    C       NAMES ARE DEPENDENT ON THE FIRST TOKEN IN THE LINE,
0166    C       NAMELY "C" OR "K".
0167
0168            TAGNAM (3) = TOKSTG (2)
0169
0170    C       SEE WHETHER THE NEXT TOKEN IS THE NAME OF A CONSTANT OR
0171    C       A LEFT ANGLE BRACKET. THE LATTER INDICATES THAT THIS IS
0172    C       THE BEGINNING OF A CONSTANT DEFINITION LIST.
0173
0174            CALL GETTOK
0175            IF (DEBUG) TYPE 300, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0176    300     FORMAT (' ',90A1)
0177            IF (DEBUG) TYPE 310, TOKTYP
0178    310     FORMAT (' TOKTYP IS ',I3)
0179            IF (TOKTYP .EQ. LANGLE) GOTO 10
0180            IF (TMPOUT) GOTO 160
0181            CALL PSCONS
0182            RETURN
0183
0184    C       THIS IS THE DEFINITION OF A CONSTANT LIST. COLLECT THE
0185    C       PARAMETERS FOR THE LIST. FIRST INITIALIZE SOME VARIABLES.
0186
0187    10      IF (.NOT. TMPOUT) GOTO 15
0188            CALL OUT2LN
0189            GOTO 70
0190
0191    15      CALL MOVSTG (TAGNAM, CONTAG)
0192            CALL MOVSTG (PRENAM, CONPRE)
0193            MRBASE (1) = 1
0194            MRBASE (2) = '0'
0195            CALL MOVSTG (MRBASE, BLBASE)
0196            MRINCR (1) = 1
0197            MRINCR (2) = '1'
0198            CALL MOVSTG (MRINCR, BLINCR)
0199
0200    C       LOOK FOR A PREFIX ARGUMENT. IF PRESENT, THIS PREFIX REPLACES
0201    C       THE $STRUCT PREFIX FOR THE DURATION OF THE CONSTANT LIST.
0202
0203            CALL GETTOK
0204            IF (DEBUG) TYPE 300, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0205            IF (TOKTYP .NE. ALPHA) GOTO 20
0206            CALL MOVSTG (TOKSTG, CONPRE)
0207            CALL GETTOK
0208            IF (DEBUG) TYPE 300, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0209
0210    C       NAME, IF ANY, IS SAVED. LOOK FOR A TAG FIELD. IF ABSENT,
0211    C       THE DEFAULT TAG FIELD IS '$C ' OR '$K ' AS STORED EARLIER AT
0212    C       THE START OF THIS ROUTINE. ANY ALPHA STRING FOUND AS
0213    C       THE SECOND ARGUMENT REPLACES THE DEFAULT TAG.
0214
0215    20      IF (DEBUG) TYPE 310, TOKTYP
```

```
0216            IF (TOKTYP .NE. COMMA) GOTO 50
0217            CALL GETTOK
0218            IF (DEBUG) TYPE 300, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0219            IF (TOKTYP .NE. ALPHA) GOTO 30
0220            CALL MOVSTG (TOKSTG, CONTAG)
0221            CALL GETTOK
0222            IF (DEBUG) TYPE 300, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0223
0224    C       TAG NAME IS SAVED. SEE IF A BASE ARGUMENT IS SPECIFIED.
0225    C       BASE ARGUMENT CAN BE AN EXPRESSION.
0226
0227    30      IF (DEBUG) TYPE 310, TOKTYP
0228            IF (TOKTYP .NE. COMMA) GOTO 50
0229            PTR = INPTR
0230            IF (DEBUG) TYPE 520, PTR, INBUF (INPTR)
0231            CALL GETEXP (INPTR)
0232            IF (DEBUG) TYPE 530, INPTR, INBUF (INPTR)
0233            IF (INBUF (INPTR) .EQ. ',') GOTO 45
0234            IF ((INBUF (INPTR) .EQ. ' ') .OR.
0235           1        (INBUF (INPTR) .EQ. '    ') .OR.
0236           2        (INBUF (INPTR) .EQ. EOL) .OR.
0237           3        (INBUF (INPTR) .EQ. ';')) GOTO 60
0238            INBUF (PTR - 1) = INPTR - PTR + 1
0239            CALL MOVSTG (INBUF (PTR - 1), CVALUE)
0240            CALL CVTEXP (CVALUE, BLBASE, MRBASE)
0241
0242    C       BASE EXPRESSION, IF ANY, IS SAVED. NOW RETRIEVE
0243    C       THE INCREMENT ARGUMENT. THIS CAN ALSO BE AN EXPRESSION.
0244
0245            INPTR = NEXTNB (INPTR)
0246            IF (INBUF (INPTR) .NE. ',') GOTO 50
0247    45      PTR = INPTR + 1
0248            INPTR = INPTR + 1
0249            IF (DEBUG) TYPE 520, PTR, INBUF (INPTR)
0250            CALL GETEXP (INPTR)
0251            IF (DEBUG) TYPE 530, INPTR, INBUF (INPTR)
0252            IF ((INBUF (INPTR) .EQ. ',') .OR.
0253           1        (INBUF (INPTR) .EQ. ' ') .OR.
0254           2        (INBUF (INPTR) .EQ. '    ') .OR.
0255           3        (INBUF (INPTR) .EQ. EOL) .OR.
0256           4        (INBUF (INPTR) .EQ. ';')) GOTO 60
0257            INBUF (PTR - 1) = INPTR - PTR + 1
0258            CALL MOVSTG (INBUF (PTR - 1), CVALUE)
0259            CALL CVTEXP (CVALUE, BLINCR, MRINCR)
0260            GOTO 60
0261
0262    C       THE OFFSET INTO THE INPUT BUFFER IS SLIGHTLY OFF BECAUSE
0263    C       SOME OPTIONAL TRAILING ARGUMENTS WERE OMITTED. BACK UP
0264    C       THE INPUT LINE OFFSET TO THE CORRECT SPOT.
0265
0266    50      INPTR = LASTNB (INPTR - 2)
0267
0268    C       ARGUMENTS ARE ALL COLLECTED. NOW OUTPUT LINES TO BLISS AND
0269    C       MARS.
0270
0271    60      IF (DEBUG) TYPE 400, PTR, INBUF (INPTR)
0272    400     FORMAT (' COMMENT STARTS AT ',I3,' CHAR IS ',A1)
```

```
0273            LINTYP = CONST
0274            CALL MDOUTL (INPTR)
0275            CALL BDOUTL (INPTR)
0276
0277    C       EACH CONSTANT NAME DEFINITION WITHIN A LIST STARTS WITH A COMMA
0278
0279    65      CLNCON = 0
0280            CONEXP = .FALSE.
0281
0282    C       NOW COLLECT THE CONSTANT NAME DEFINITIONS ONE AT A TIME UNTIL
0283    C       THE END OF THE LIST IS REACHED.
0284
0285    70      CALL GETLIN
0286            IF (ENDFIL) RETURN
0287
0288    C       GET A TOKEN AND SEE WHETHER IT IS A RIGHT ANGLE BRACKET
0289    C       OR AN ALPHA STRING. THE FORMER MEANS THAT THE CONSTANT
0290    C       LIST IS FINISHED. THE LATTER MEANS THAT THIS IS ANOTHER
0291    C       CONSTANT NAME DEFINITION.
0292
0293            IF ((.NOT. ENDEXP) .AND. (CONEXP)) GOTO 77
0294            CALL GETTOK
0295            IF (DEBUG) TYPE 300, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0296            IF (DEBUG) TYPE 310, TOKTYP
0297            IF (TOKTYP .EQ. RANGLE) GOTO 150
0298            IF (TMPOUT) GOTO 140
0299            IF ((TOKTYP .EQ. EOL) .OR. (TOKTYP .EQ. SEMI)) GOTO 110
0300    77      LINTYP = CONSTN
0301
0302    C       THIS IS THE DECLARATION OF A CONSTANT NAME.
0303    C       NOW INITIALIZE SOME VARIABLES.
0304
0305    80      IF (TMPOUT) GOTO 140
0306            ENDEXP = .FALSE.
0307            CVALUE (1) = 0
0308            BVALUE (1) = 0
0309            MVALUE (1) = 0
0310            FLDNAM (1) = 0
0311
0312            IF (CONEXP) GOTO 86
0313            IF (TOKTYP .NE. ALPHA) GOTO 220
0314
0315    C       THIS IS A NAME TO DEFINE. SAVE IT.
0316
0317            CALL MOVSTG (TOKSTG, FLDNAM)
0318            CALL GETTOK
0319            IF (DEBUG) TYPE 300, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0320
0321    C       NOW SEE IF THERE IS A VALUE FIELD.
0322
0323            IF (DEBUG) TYPE 310, TOKTYP
0324            IF (TOKTYP .NE. COMMA) GOTO 90
0325            GOTO 89
0326
0327    C       IF YOU GET HERE, THIS IS A CONTINUATION LINE FROM AN
0328    C       EXPRESSION. SKIP OVER THE BLANKS AND TABS BEFORE TRYING
0329    C       TO GET THE EXPRESSION.
```

```
0330
0331     86       DO 87 INPTR = 2, INBUF (1) + 1
0332              IF ((INBUF (INPTR) .NE. ' ') .AND.
0333              1       (INBUF (INPTR) .NE. '    ')) GOTO 89
0334     87       CONTINUE
0335
0336     C        ARRIVAL HERE IS AN ERROR
0337
0338              GOTO 230
0339
0340     C        THE NAME HAS BEEN SAVED. THE NEXT ARGUMENT IS AN OPTIONAL
0341     C        EXPRESSION. IF IT IS OF ZERO LENGTH, THE ARGUMENT DEFAULTS
0342     C        TO THE VALUE OF ONE. SAVE THE LINE POINTER TO CHECK FOR ZERO
0343     C        LENGTH LATER.
0344
0345     89       PTR = INPTR
0346              IF (DEBUG) TYPE 520, PTR, INBUF (INPTR)
0347     520      FORMAT (' EXPRESSION STARTS AT OFFSET ',I3,' CHAR IS ',A1)
0348              CALL GETEXP (INPTR)
0349              IF (DEBUG) TYPE 530, INPTR, INBUF (INPTR)
0350     530      FORMAT (' EXPRESSION STOPS AT OFFSET ',I3,' CHAR IS ',A1)
0351              IF ((INBUF (INPTR) .EQ. ',') .OR.
0352              1       (INBUF (INPTR) .EQ. ' ') .OR.
0353              2       (INBUF (INPTR) .EQ. '    ') .OR.
0354              3       (INBUF (INPTR) .EQ. ';') .OR.
0355              4       (INBUF (INPTR) .EQ. EOL)) GOTO 95
0356              IF (INBUF (INPTR) .EQ. '-') CONEXP = .TRUE.
0357              IF ((INBUF (INPTR) .NE. '-') .AND.
0358              1       (CONEXP)) ENDEXP = .TRUE.
0359
0360     C        AN EXPRESSION WAS FOUND, COMPUTE ITS LENGTH.
0361
0362              IF (DEBUG) TYPE 540, PTR, INPTR
0363     540      FORMAT (' START IS ',I3,' END IS 'I3)
0364              INBUF (PTR - 1) = INPTR - PTR + 1
0365              IF (DEBUG) TYPE 550, INBUF (PTR - 1)
0366     550      FORMAT (' COUNT IS ',I3)
0367              IF (DEBUG) TYPE 300, (INBUF (I), I = PTR, INBUF (PTR - 1) + 1)
0368
0369     C        NOW SAVE THE EXPRESSION STRING AND CONVERT IT TO MARS AND
0370     C        BLISS.
0371
0372              CALL MOVSTG (INBUF (PTR - 1), CVALUE)
0373              CALL CVTEXP (CVALUE, BVALUE, MVALUE)
0374
0375     C        THE EXPRESSION IS PROCESSED.
0376     C        SAVE THE REST OF THE LINE AND GO LOOK FOR ANOTHER
0377     C        CONSTANT DEFINITION.
0378
0379              GOTO 95
0380
0381     C        THE OFFSET INTO THE INPUT LINE IS OFF BY A FEW CHARACTERS BECAUSE
0382     C        THE EXPRESSION ARGUMENT WAS OMITTED. BACK UP TO THE CORRECT
0383     C        POSITION.
0384
0385     90       INPTR = LASTNB (INPTR - 2)
0386
```

```
0387     C        COMMA WAS GIVEN AFTER NAME, BUT NO EXPRESSION WAS GIVEN.
0388     C        ADJUST INPTR.
0389
0390     95       INBUF (INPTR) = INBUF (1) - INPTR + 1
0391     100      CALL GETREM (INPTR)
0392              IF ((CLNCON .LT. 10) .OR. (CONEXP)) GOTO 121
0393
0394     C        10 CONSTANT NAMES HAVE BEEN DEFINED. CLOSE OUT THIS
0395     C        CONSTANT DEFINITION LIST, AND START ANOTHER.
0396
0397              CALL OUTCNL
0398              GOTO 122
0399
0400     C        THIS IS A BLANK OR COMMENT ONLY LINE.
0401     C        OUTPUT IT AND GO BACK FOR ANOTHER.
0402
0403     110      CALL OUTBCL
0404              GOTO 70
0405
0406     C        OUTPUT THE CURRENT LINE THEN GO GET ANOTHER.
0407
0408     121      CALL MDOUTL(PTR)
0409              CALL BDOUTL(PTR)
0410              CLNCON = CLNCON+1
0411              IF (ENDEXP) CONEXP = .FALSE.
0412              GOTO 70
0413
0414     122      CALL MDOUTL(PTR)
0415              CALL BDOUTL(PTR)
0416              CLNCON = CLNCON+1
0417              IF (ENDEXP) CONEXP = .FALSE.
0418              GOTO 65
0419
0420     140      CALL OUT2LN
0421              GOTO 70
0422
0423     C        OUTPUT THE FINAL CLOSING OF THE CONSTANT DEFINITION LIST.
0424
0425     150      IF (TMPOUT) GOTO 160
0426              LINTYP = CONSTE
0427              CALL MDOUTL (INPTR)
0428              CALL BDOUTL (INPTR)
0429              RETURN
0430
0431     160      CALL OUT2LN
0432              RETURN
0433
0434     C        ERROR REPORTING
0435
0436     200      TYPE 2000
0437     2000     FORMAT (' INVALID BASE ARGUMENT IN CONSTANT LIST')
0438              RETURN
0439
0440     210      TYPE 2100
0441     2100     FORMAT (' INVALID INCREMENT ARGUMENT IN CONSTANT LIST')
0442              RETURN
0443
```

```
0444     220      TYPE 2200
0445     2200     FORMAT (' INVALID NAME IN CONSTANT DEFINITION')
0446              RETURN
0447
0448     230      TYPE 2300
0449     2300     FORMAT (' INVALID CONTINUED EXPRESSION IN CONSTANT LIST')
0450              RETURN
0451
0452              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	2310	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	373	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	208	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	6790	

ENTRY POINTS

Address	Type	Name
0-00000000		PCONST

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	2-00000002	I*2	CLNCON	4-00000004	I*2	COL
5-00000016	L*2	CONEXP	8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL
11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT
5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ
2-00000004	I*2	I	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM
9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF
2-00000000	I*2	PTR	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL
5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN
5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-000000A1	10	0-000000B3	15	0-00000172	20	0-00000228	30	0-00000354	45	0-0000042A	50
0-00000449	60	0-0000049E	65	0-000004A7	70	0-0000055B	77	**	80	0-0000060A	86
**	87	0-00000643	89	0-000007F8	90	0-00000817	95	**	100	0-0000084E	110
0-00000858	121	0-0000087E	122	0-000008A4	140	0-000008AE	150	0-000008CE	160	**	200
**	210	0-000008D6	220	0-000008EE	230	1-00000000	300'	1-00000008	310'	1-00000018	400'
1-0000003D	520'	1-0000006C	530'	1-0000009A	540'	1-000000B5	550'	1-000000C4	2000'	1-000000EE	2100'
1-0000011D	2200'	1-00000144	2300'								

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	BDOUTL		CVTEXP		GETEXP		GETLIN		GETREM		GETTOK
I*2	LASTNB		MDOUTL		MOVSTG	I*2	NEXTNB		OUT2LN		OUTBCL
	OUTCNL		PSCONS								

```
0001            SUBROUTINE PSCONS
0002
0003    C       THIS ROUTINE PROCESSES A SINGLE CONSTANT DEFINITION THAT
0004    C       IS NOT PART OF A LIST. THE CONSTANT DEFINITION HAS TWO
0005    C       ARGUMENTS, BOTH OF WHICH ARE REQUIRED -- THE NAME AND THE
0006    C       VALUE. THE VALUE IS AN ARBITRARILY COMPLICATED EXPRESSION.
0007
0008            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0110
0111            INTEGER PTR
0112
0113    C       INITIALIZE THE LINE TYPE. REMEMBER THAT THE TAG NAME WAS
0114    C       INITIALIZED IN THE ROUTINE PCONST, WHICH CALLED THIS ROUTINE.
0115
0116            LINTYP = SCONST
0117
0118    C       NOW LOOK AT THE TYPE OF TOKEN THAT HAS BEEN FOUND BY THE
0119    C       CALLING ROUTINE, PCONST.
0120
0121            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0122    500     FORMAT (' ',90A1)
0123            IF (DEBUG) TYPE 510, TOKTYP
0124    510     FORMAT (' TOKTYP IS ',I3)
0125            IF (TOKTYP .NE. ALPHA) GOTO 100
0126            CALL MOVSTG (TOKSTG, FLDNAM)
0127            CALL GETTOK
0128            IF (DEBUG) TYPE 510, TOKTYP
0129            IF (TOKTYP .NE. COMMA) GOTO 110
0130
0131    C       THE NAME HAS BEEN SAVED. THE NEXT ARGUMENT IS AN EXPRESSION.
0132    C       THE OFFSET TO THE BEGINNING OF THE EXPRESSION IS SAVED
0133    C       TO LATER DETERMINE WHETHER THE EXPRESSION IS OF NON-ZERO
0134    C       LENGTH.
0135
0136            PTR = INPTR
0137            IF (DEBUG) TYPE 330, PTR, INBUF (INPTR)
0138    330     FORMAT (' EXPRESSION STARTS AT OFFSET ',I3,' CHAR IS ',A1)
0139            CALL GETEXP (INPTR)
0140            IF (DEBUG) TYPE 340, INPTR, INBUF (INPTR)
0141    340     FORMAT (' EXPRESSION STOPS AT OFFSET ',I3,' CHAR IS ',A1)
0142            IF (INBUF (INPTR) .EQ. ',') GOTO 110
0143
0144    C       AN EXPRESSION WAS FOUND. COMPUTE THE LENGTH OF THE EXPRESSION.
0145
0146            INBUF (PTR - 1) = INPTR - PTR + 1
0147            IF (DEBUG) TYPE 500, (INBUF (I), I = PTR, INBUF (PTR - 1) + 1)
0148
0149    C       NOW SAVE THE EXPRESSION STRING AND CONVERT IT TO MARS
0150    C       AND BLISS.
0151
0152            CALL MOVSTG (INBUF (PTR - 1), CVALUE)
0153            CALL CVTEXP (CVALUE, BVALUE, MVALUE)
0154            INPTR = INPTR + 1
0155
0156    C       THE EXPRESSION IS PROCESSED. NOW OUTPUT THE DEFINITION
0157    C       TO THE MARS AND BLISS TRANSLATED OUTPUT FILES.
0158
```

```
0159            CALL MDOUTL (INPTR)
0160            CALL BDOUTL (INPTR)
0161            RETURN
0162
0163    C       ERROR REPORTING
0164
0165    100     TYPE 1000
0166    1000    FORMAT (' NAME MISSING IN CONSTANT DEFINITION')
0167            RETURN
0168
0169    110     TYPE 1100
0170    1100    FORMAT (' EXPRESSION MISSING IN CONSTANT DEFINITION')
0171            RETURN
0172            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	518	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	201	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	68	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4686	

ENTRY POINTS

Address	Type	Name
0-00000000		PSCONS

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000002	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN

9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	2-00000000	I*2	PTR
5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK
11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT
9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ
5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ			

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)

10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-000001D6	100	0-000001EE	110	1-00000018	330'	1-00000047	340'	1-00000000	500'	1-00000008	510'
1-00000075	1000'	1-0000009C	1100'								

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	BDOUTL		CVTEXP		GETEXP		GETTOK		MDOUTL		MOVSTG

```
0001     C       Version V02-001
0002     C
0003     C*****************************************************************************
0004     C*                                                                           *
0005     C*  COPYRIGHT (c) 1980                                                       *
0006     C*  BY DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASS.                         *
0007     C*                                                                           *
0008     C*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND  COPIED   *
0009     C*  ONLY  IN  ACCORDANCE  WITH  THE  TERMS  OF  SUCH  LICENSE AND WITH THE   *
0010     C*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE.  THIS SOFTWARE OR  ANY  OTHER   *
0011     C*  COPIES  THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY   *
0012     C*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE  IS  HEREBY   *
0013     C*  TRANSFERRED.                                                             *
0014     C*                                                                           *
0015     C*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE  WITHOUT  NOTICE   *
0016     C*  AND  SHOULD  NOT  BE  CONSTRUED  AS  A COMMITMENT BY DIGITAL EQUIPMENT   *
0017     C*  CORPORATION.                                                             *
0018     C*                                                                           *
0019     C*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR  RELIABILITY  OF  ITS   *
0020     C*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
0021     C*                                                                           *
0022     C*****************************************************************************
0023     C
0024     C       REVISION HISTORY:
0025     C               22-03-77        CP      IF MARK IN A NEGATIVE CONTEXT, JUST
0026     C                                       SAVE THE CURRENT NEGATIVE COUNT, AND
0027     C                                       OUTPUT THE LINE TO THE TMP FILE.
0028     C
0029     C               19-04-77        TC      USE THE ADDITIONAL CONTEX VARIABLE
0030     C                                       DISCUSSED IN IN:MDL32CMN.CMN
0031
0032             SUBROUTINE PMARK
0033
0034     C       SAVES THE CONTEXT OF THE CURRENT STRUCTURE DECLARATION SO
0035     C       THAT THIS CONTEXT CAN BE RESTORED AT SOME LATER POINT.
0036
0037             INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0139
0140             INTEGER INDEX
0141
0142             CALL GETTOK
0143             IF (TOKTYP .NE. NUMBER) GOTO 1000
0144             INDEX = INTVAL (TOKSTG)
0145             IF ((INDEX .LE. 0) .OR.
0146            1        (INDEX .GT. 10)) GOTO 1000
0147             IF (TMPOUT) GOTO 20
0148             CALL SAVCTX (INDEX)
0149             INPTR = INPTR - 1
0150             CALL MDOUTL (INPTR)
0151             CALL BDOUTL (INPTR)
0152             RETURN
0153
0154     20      CONTEX (1, INDEX) = NEGCNT
0155             CONTEX (9, INDEX) = 1
0156             CALL OUT2LN
0157             RETURN
0158
```

```
0159     C        ERROR REPORTING
0160
0161     1000     TYPE 1010
0162     1010     FORMAT (' INVALID ARGUMENT TO MARK COMMAND')
0163              RETURN
0164              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	142	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	36	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	28	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4105	

ENTRY POINTS

Address	Type	Name
0-00000000		PMARK

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	INDEX
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

```
  9-00000662  I*2  BLINCR      162  (81)
  6-0000C17E  I*2  BLSSIZ       20  (10)
  9-000003D8  I*2  BVALUE      162  (81)
  6-000000EA  I*2  BYTSIZ       20  (10)
  6-000001B4  I*2  COMGBL       12  (6)
  6-000000C4  I*2  COMMAS        4  (2)
  6-00000112  I*2  CONBAS       20  (10)
  6-00000126  I*2  CONINC       20  (10)
  9-0000012C  I*2  CONPRE       32  (16)
  9-0000014C  I*2  CONTAG       32  (16)
  9-000007A6  I*2  CONTEX      198  (9, 11)
  6-000001D6  I*2  CPAREN        4  (2)
  6-000001D0  I*2  CPRCOM        6  (3)
  9-00000170  I*2  CVALUE      162  (81)
  6-0000004C  I*2  DEFEND       20  (10)
  6-00000022  I*2  DEFINI       20  (10)
  6-000001DE  I*2  DOLBIT       26  (13)
  6-000001F8  I*2  DOLBYT       28  (14)
  6-00000036  I*2  DOLDEF       12  (6)
  6-00000214  I*2  DOLFLD       24  (12)
  6-00000016  I*2  DOLGBL       12  (6)
  6-00000234  I*2  DOLLAR        4  (2)
  6-00000090  I*2  DOLVLD       18  (9)
  6-000000DE  I*2  DOTBLK       12  (6)
  6-00000042  I*2  DOTEQS       10  (5)
  6-00000000  I*2  DOTMAC       22  (11)
  6-00000060  I*2  ENDMAC       18  (9)
  6-000000B2  I*2  EQULST       18  (9)
  6-00000102  I*2  EQUTAB       12  (6)
  6-0000007E  I*2  EXCLSP       14  (7)
  6-00000230  I*2  EXPCLO        4  (2)
  6-0000022C  I*2  EXPOPN        4  (2)
  9-00000088  I*2  FLDNAM       72  (36)
  6-000001B0  I*2  HYPHEN        4  (2)
 10-00000000  I*2  INBUF       166  (83)
  6-000000C8  I*2  LANHYP        6  (3)
  3-00000000  L*1  LINE        133  (133)
  6-0000013A  I*2  LITTAB       18  (9)
  6-0000015A  I*2  MACTAB       16  (8)
 10-000000AA  I*2  MARBUF      240  (120)
  9-000005C0  I*2  MRBASE      162  (81)
  9-00000704  I*2  MRINCR      162  (81)
  9-00000336  I*2  MVALUE      162  (81)
  3-0000010A  L*1  NAME         32  (32)
  7-00000000  I*2  NEGSGN        4  (2)
  3-0000012A  L*1  NUMSTR      133  (133)
  6-000001DA  I*2  OASIGN        4  (2)
  6-0000016A  I*2  OFFSET       20  (10)
  6-000001A2  I*2  ONESHF        6  (3)
  6-0000010E  I*2  OPAREN        4  (2)
  9-000002CE  I*2  OSBNAM       32  (16)
  9-000002EE  I*2  OTGNAM       32  (16)
  9-0000030E  I*2  OUNTYP       32  (16)
  6-0000019A  I*2  PCTSEM        8  (4)
  3-00000085  L*1  PREFIX      133  (133)
  9-00000052  I*2  PRENAM       32  (16)
  6-000000D4  I*2  RANHYP        6  (3)
```

```
  9-0000021A  I*2  RSTLIN                180  (90)
  6-00000154  I*2  SEMSPC                  6  (3)
  6-000000FE  I*2  SPCSTG                  4  (2)
  6-000001A8  I*2  SPHTSP                  8  (4)
  9-00000092  I*2  STRSTG                 32  (16)
  6-00000072  I*2  SUFDEF                  8  (4)
  9-00000072  I*2  SUFNAM                 32  (16)
  6-0000014C  I*2  TABEQS                  8  (4)
  6-000000CE  I*2  TABLAN                  6  (3)
  6-000001CA  I*2  TABOPR                  6  (3)
  6-000001C0  I*2  TABPRN                 10  (5)
  6-000000AC  I*2  TABRAN                  6  (3)
  6-0000008C  I*2  TABSTG                  4  (2)
  9-00000100  I*2  TAGNAM                 32  (16)
  9-0000047A  I*2  TMPVAL                162  (81)
  9-00000000  I*2  TOKSTG                 80  (40)
  6-00000238  I*2  UNDVLD                 18  (9)
  6-0000007A  I*2  UNITYP                  4  (2)
  6-00000192  I*2  ZEROSG                  4  (2)
  6-000000A2  I*2  ZRLAHY                 10  (5)

LABELS

    Address   Label       Address   Label       Address   Label

  0-00000052  20        0-00000076  1000      1-00000000  1010'

FUNCTIONS AND SUBROUTINES REFERENCED

  Type  Name              Type  Name              Type  Name              Type  Name              Type  Name              Type  Name
        BDOUTL                  GETTOK            I*2   INTVAL                  MDOUTL                  OUT2LN                  SAVCTX
```

```
0001     C        REVISION HISTORY:
0002     C                22-03-77        CP      RENAME THIS ROUTINE TO PPOINT FROM
0003     C                                        PORIG. IF POINTING IN A NEGATIVE
0004     C                                        CONTEXT, SAVE THE CURRENT NEGATIVE COUNT
0005     C                                        IF IT IS A NEW MAXIMUM, AND RESTORE
0006     C                                        THE NEGATIVE COUNT AT THE TIME OF THE
0007     C                                        SPECIFIED MARK. THEN OUTPUT THE LINE
0008     C                                        TO THE TMP FILE.
0009     C                                        HAVE THIS ROUTINE ALSO HANDLE REORIGINS.
0010     C                                        THEY ARE THE SAME AS POINTS ONLY FEWER
0011     C                                        CONTEXT VARIABLES ARE RESET.
0012     C                                        IN THE ERROR CHECK FOR AN UNSAVED MARK,
0013     C                                        CHECK THE FIFTH POSITION INSTEAD OF THE
0014     C                                        FIRST, SINCE BLFOFS CAN BE NEGATIVE.
0015     C
0016     C                13-04-77        TC      SAVING OF THE MAXIMUM NEGATIVE
0017     C                                        COUNT ELIMINATED: MAXIMUM OFFSET
0018     C                                        WILL ALWAYS BE POSITIVE OR ZERO.
0019     C                                        POINT OR ORIGIN TO A PLACE
0020     C                                        OUTSIDE THE CURRENT NEGATIVE
0021     C                                        BLOCK TERMINATES THE BLOCK.
0022     C
0023     C                19-04-77        TC      USE THE NEW CONTEX VARIABLE
0024     C                                        DISCUSSED IN SRC$:MDL32CMN.CMN
0025     C
0026     C                26-04-77        TC      MAKE "0" TERMINATE NEGATIVE
0027     C                                        FIELD BLOCK REGARDLESS.
0028
0029              SUBROUTINE PPOINT
0030
0031     C        RESTORES THE CONTEXT OF THE STRUCTURE DECLARATION AT THE
0032     C        TIME OF A PREVIOUS MARK COMMAND. IF NO ARGUMENT IS GIVEN TO
0033     C        THE REORIGIN COMMAND, THE CONTEXT OF THE MAXIMUM STRUCTURE
0034     C        CONTEXT IS RESTORED.
0035
0036              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0138
0139              INTEGER INDEX
0140
0141              CALL GETTOK
0142              IF (TOKTYP .NE. NUMBER) GOTO 20
0143              INDEX = INTVAL (TOKSTG)
0144              IF ((INDEX .LE. 0) .OR.
0145             1        (INDEX .GT. 10)) GOTO 1000
0146              IF (CONTEX (9, INDEX) .LT. 0) GOTO 1100
0147              IF (TMPOUT) GOTO 50
0148
0149     C        SEE IF THE CURRENT STRUCTURE CONTEXT IS THE GREATEST
0150     C        (LARGEST) YET. IF SO, SAVE IT AS THE NEW MAXIMUM VALUES.
0151
0152              IF (BLFOFS .GT. CONTEX (1, 11)) CALL SAVCTX (11)
0153              GOTO 30
0154
0155     C        NO ARGUMENT WAS GIVEN. JUST REORIGIN TO THE MAXIMUM CONTEXT.
0156
0157     20       INDEX = 11
0158              IF (TMPOUT) GOTO 50
```

```
0159     30       IF (LINTYP .EQ. ORIGIN) GOTO 35
0160              CALL RESCTX (INDEX)
0161              GOTO 40
0162
0163     35       CALL RESETO (INDEX)
0164     40       INPTR = INPTR - 1
0165              LINTYP = ORIGIN
0166              CALL MDOUTL (INPTR)
0167              CALL BDOUTL (INPTR)
0168              RETURN
0169
0170     C        POINTER OR ORIGIN  IN NEGATIVE CONTEXT.
0171
0172     50       IF (LINTYP .EQ. ORIGIN) GOTO 55
0173              IF (CONTEX (9, INDEX) .LE. 0) GOTO 55
0174              NEGCNT = CONTEX (1, INDEX)
0175              CALL OUT2LN
0176              RETURN
0177
0178     C        POINTS OUTSIDE BLOCK OR IS AN "0" COMMAND
0179
0180     55       CALL OUT2LN
0181              CALL STANEG
0182              RETURN
0183
0184     C        ERROR REPORTING
0185
0186     1000     TYPE 1010
0187     1010     FORMAT (' INVALID POSITION NAME')
0188              RETURN
0189
0190     1100     TYPE 1020
0191     1020     FORMAT (' POSITION NAME NOT DEFINED')
0192              RETURN
0193              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	270	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	58	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	36	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4263	

ENTRY POINTS

Address	Type	Name
0-00000000		PPOINT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	INDEX
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

```
  9-00000662  I*2  BLINCR      162  (81)
  6-0000017E  I*2  BLSSIZ       20  (10)
  9-000003D8  I*2  BVALUE      162  (81)
  6-000000EA  I*2  BYTSIZ       20  (10)
  6-000001B4  I*2  COMGBL       12  (6)
  6-000000C4  I*2  COMMAS        4  (2)
  6-00000112  I*2  CONBAS       20  (10)
  6-00000126  I*2  CONINC       20  (10)
  9-0000012C  I*2  CONPRE       32  (16)
  9-0000014C  I*2  CONTAG       32  (16)
  9-000007A6  I*2  CONTEX      198  (9, 11)
  6-000001D6  I*2  CPAREN        4  (2)
  6-000001D0  I*2  CPRCOM        6  (3)
  9-00000170  I*2  CVALUE      162  (81)
  6-0000004C  I*2  DEFEND       20  (10)
  6-00000022  I*2  DEFINI       20  (10)
  6-000001DE  I*2  DOLBIT       26  (13)
  6-000001F8  I*2  DOLBYT       28  (14)
  6-00000036  I*2  DOLDEF       12  (6)
  6-00000214  I*2  DOLFLD       24  (12)
  6-00000016  I*2  DOLGBL       12  (6)
  6-00000234  I*2  DOLLAR        4  (2)
  6-00000090  I*2  DOLVLD       18  (9)
  6-000000DE  I*2  DOTBLK       12  (6)
  6-00000042  I*2  DOTEQS       10  (5)
  6-00000000  I*2  DOTMAC       22  (11)
  6-00000060  I*2  ENDMAC       18  (9)
  6-000000B2  I*2  EQULST       18  (9)
  6-00000102  I*2  EQUTAB       12  (6)
  6-0000007E  I*2  EXCLSP       14  (7)
  6-00000230  I*2  EXPCLO        4  (2)
  6-0000022C  I*2  EXPOPN        4  (2)
  9-000000B8  I*2  FLDNAM       72  (36)
  6-000001B0  I*2  HYPHEN        4  (2)
 10-00000000  I*2  INBUF       166  (83)
  6-000000C8  I*2  LANHYP        6  (3)
  3-00000000  L*1  LINE        133  (133)
  6-0000013A  I*2  LITTAB       18  (9)
  6-0000015A  I*2  MACTAB       16  (8)
 10-000000AA  I*2  MARBUF      240  (120)
  9-000005C0  I*2  MRBASE      162  (81)
  9-00000704  I*2  MRINCR      162  (81)
  9-00000336  I*2  MVALUE      162  (81)
  3-0000010A  L*1  NAME         32  (32)
  7-00000000  I*2  NEGSGN        4  (2)
  3-0000012A  L*1  NUMSTR      133  (133)
  6-000001DA  I*2  OASIGN        4  (2)
  6-0000016A  I*2  OFFSET       20  (10)
  6-000001A2  I*2  ONESHF        6  (3)
  6-0000010E  I*2  OPAREN        4  (2)
  9-000002CE  I*2  OSBNAM       32  (16)
  9-000002EE  I*2  OTGNAM       32  (16)
  9-0000030E  I*2  OUNTYP       32  (16)
  6-0000019A  I*2  PCTSEM        8  (4)
  3-00000085  L*1  PREFIX      133  (133)
  9-00000052  I*2  PRENAM       32  (16)
  6-000000D4  I*2  RANHYP        6  (3)
```

```
  9-0000021A  I*2  RSTLIN                180  (90)
  6-00000154  I*2  SEMSPC                  6  (3)
  6-000000FE  I*2  SPCSTG                  4  (2)
  6-000001A8  I*2  SPHYSP                  8  (4)
  9-00000092  I*2  STRSTG                 32  (16)
  6-00000072  I*2  SUFDEF                  8  (4)
  9-00000072  I*2  SUFNAM                 32  (16)
  6-0000014C  I*2  TABEQS                  8  (4)
  6-000000CE  I*2  TABLAN                  6  (3)
  6-000001CA  I*2  TABOPR                  6  (3)
  6-000001C0  I*2  TABPRN                 10  (5)
  6-000000AC  I*2  TABRAN                  6  (3)
  6-0000008C  I*2  TABSTG                  4  (2)
  9-00000100  I*2  TAGNAM                 32  (16)
  9-0000047A  I*2  TMPVAL                162  (81)
  9-00000000  I*2  TOKSTG                 80  (40)
  6-00000238  I*2  UNDVLD                 18  (9)
  6-0000007A  I*2  UNITYP                  4  (2)
  6-00000192  I*2  ZEROSG                  4  (2)
  6-000000A2  I*2  ZRLAHY                 10  (5)

LABELS

    Address   Label       Address   Label       Address   Label       Address   Label       Address   Label       Address   Label
  0-00000060  20        0-0000006C  30        0-0000007D  35        0-00000085  40        0-000000A1  50        0-000000CF  55
  0-000000DE  1000      1-00000004  1010'     1-0000001D  1020'     0-000000F6  1100

FUNCTIONS AND SUBROUTINES REFERENCED

  Type  Name              Type  Name              Type  Name              Type  Name              Type  Name              Type  Name
        BDOUTL                  GETTOK            I*2   INTVAL                  MDOUTL                  OUT2LN                  RESCTX
        RESETO                  SAVCTX                  STANEG
```

```
0001    C       REVISION HISTORY
0002    C               19-04-77        TC      USE NEW CONTEX VARIABLE DISCUSSED
0003    C                                       IN SRC$:MDL32CMN.CMN
0004
0005            SUBROUTINE SAVCTX (IND)
0006
0007    C       SAVES THE CONTEXT OF THE STRUCTURE DECLARATION. THE
0008    C       VARIABLES SAVED ARE AS FOLLOWS:
0009    C
0010    C       BLFOFS  - THE TOTAL NUMBER OF BYTES ALLOCATED SO FAR.
0011    C       BOFSET  - THE BASE OFFSET OF THE LAST GROUP OF SUBFIELDS.
0012    C       FOFSET  - THE VALUE BLFOFS WILL BECOME WHEN THE TOTAL ALLOCATION
0013    C                 IS PERFORMED FOR THE LAST FIELD DECLARATION.
0014    C       SOFSET  - THE VALUE BLFOFS WILL BECOME WHEN THE ALLOCATION
0015    C                 IS PERFORMED FOR THE LAST SUBFIELD DECLARATION.
0016    C       LFDSIZ  - THE SIZE IN BYTES OF THE LAST FIELD DEFINED.
0017    C       LSBSIZ  - THE TOTAL SIZE IN BYTES OF THE LAST SUBFIELD DEFINED.
0018    C       LASLIN  - THE TYPE OF THE LAST DEFINITION LINE PROCESSED.
0019    C       FLDLAS  - A BOOLEAN THAT TELLS WHETHER THE LAST DEFINITION
0020    C                 PROCESSED WAS A FIELD OR A SUBFIELD, OR NEITHER.
0021    C                 TRUE MEANS FIELD OR SUBFIELD. FALSE MEANS SOMETHING ELSE.
0022    C
0023    C       THE ARGUMENT IND IS THE INDEX INTO THE CONTEXT TABLE.
0024
0025            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0127
0128            INTEGER IND
0129
0130            CONTEX (1, IND) = BLFOFS
0131            CONTEX (2, IND) = BOFSET
0132            CONTEX (3, IND) = FOFSET
0133            CONTEX (4, IND) = SOFSET
0134            CONTEX (5, IND) = LFDSIZ
0135            CONTEX (6, IND) = LSBSIZ
0136            CONTEX (7, IND) = LASLIN
0137            CONTEX (8, IND) = FLDLAS
0138            CONTEX (9, IND) = 0
0139            RETURN
0140            END
```

ET

02
02
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02

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	89	PIC CON REL LCL SHR EXE RD NOWRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3988	

ENTRY POINTS

Address	Type	Name
0-00000000		SAVCTX

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	AP-0000004@	I*2	IND
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)

9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)

```
  6-000000FE  I*2  SPCSTG      4  (2)
  6-000001A8  I*2  SPHYSP      8  (4)
  9-00000092  I*2  STRSTG     32  (16)
  6-00000072  I*2  SUFDEF      8  (4)
  9-00000072  I*2  SUFNAM     32  (16)
  6-0000014C  I*2  TABEQS      8  (4)
  6-000000CE  I*2  TABLAN      6  (3)
  6-000001CA  I*2  TABOPR      6  (3)
  6-000001C0  I*2  TABPRN     10  (5)
  6-000000AC  I*2  TABRAN      6  (3)
  6-0000008C  I*2  TABSTG      4  (2)
  9-00000100  I*2  TAGNAM     32  (16)
  9-0000047A  I*2  IMPVAL    162  (81)
  9-00000000  I*2  TOKSTG     80  (40)
  6-00000238  I*2  UNDVLD     18  (9)
  6-0000007A  I*2  UNITYP      4  (2)
  6-00000192  I*2  ZEROSG      4  (2)
  6-000000A2  I*2  ZRLAHY     10  (5)
```

```
0001            SUBROUTINE RESCTX (IND)
0002
0003    C       RESTORES THE CONTEXT OF THE STRUCTURE DECLARATION. THE
0004    C       ORDER AND DEFINITION OF THE VARIABLES ARE DESCRIBED IN
0005    C       THE PROLOGUE FOR SAVCTX. THE ARGUMENT IND IS THE INDEX INTO THE
0006    C       CONTEXT TABLE.
0007
0008            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
C110
0111            INTEGER IND
0112
0113            BLFOFS = CONTEX (1, IND)
0114            BCFSET = CONTEX (2, IND)
0115            FOFSET = CONTEX (3, IND)
0116            SOFSET = CONTEX (4, IND)
0117            LFDSIZ = CONTEX (5, IND)
0118            LSBSIZ = CONTEX (6, IND)
0119            LASLIN = CONTEX (7, IND)
0120            FLDLAS = CONTEX (8, IND)
0121            RETURN
0122            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	84	PIC CON REL LCL SHR EXE RD NOWRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3983	

ENTRY POINTS

Address	Type	Name
0-00000000		RESCTX

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000C00E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	AP-00000004@	I*2	IND
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)

9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)

```
  6-000000FE   I*2  SPCSTG          4  (2)
  6-000001A8   I*2  SPHYSP          8  (4)
  9-00000092   I*2  STRSTG         32  (16)
  6-00000072   I*2  SUFDEF          8  (4)
  9-00000072   I*2  SUFNAM         32  (16)
  6-0000014C   I*2  TABEQS          8  (4)
  6-000000CE   I*2  TABLAN          6  (3)
  6-000001CA   I*2  TABOPR          6  (3)
  6-000001C0   I*2  TABPRM         10  (5)
  6-000000AC   I*2  TABRAN          6  (3)
  6-0000008C   I*2  TABSTG          4  (2)
  9-00000100   I*2  TAGNAM         32  (16)
  9-0000047A   I*2  IMPVAL        162  (81)
  9-00000000   I*2  TOKSTG         80  (40)
  6-00000238   I*2  UNDVLD         18  (9)
  6-0000007A   I*2  UNITYP          4  (2)
  6-00000192   I*2  ZEROSG          4  (2)
  6-000000A2   I*2  ZRLAHY         10  (5)
```

0000000000

```
0001              SUBROUTINE RESETO (IND)
0002
0003        C     THIS IS A NEW ROUTINE IN VERSION 1.3.
0004        C
0005        C     IT RESETS THE CONTEXT OF A PREVIOUSLY MARKED POINT. IT ONLY
0006        C     RESETS A FEW VARIABLES. ALL OTHER CONTEXT VARIABLES ARE
0007        C     SET TO THEIR VALUES AT THE BEGINNING OF THE STRUCTURE
0008        C     DEFINITION.
0009
0010              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0112
0113              INTEGER IND
0114
0115              BLFOFS = CONTEX (1, IND)
0116              BOFSET = 0
0117              FOFSET = BLFOFS
0118              SOFSET = 0
0119              LFDSIZ = 0
0120              LSBSIZ = 0
0121              FLDLAS = .FALSE.
0122              LASLIN = 0
0123              RETURN
0124              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	58	PIC CON REL LCL SHR EXE RD NOWRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3957	

ENTRY POINTS

Address	Type	Name
0-00000000		RESETO

EL

01
01
01

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	AP-00000004@	I*2	IND
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)

6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

```
0001     C       Version V02-001
0002     C
0003     C*****************************************************************************
0004     C*                                                                           *
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0019     C*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR  RELIABILITY  OF  ITS   *
0020     C*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
0021     C*                                                                           *
0022     C*****************************************************************************
0023     C
0024     C       REVISION HISTORY:
0025     C               29-06-77        TC      ROUTINE CHKMAK ELIMINATED (2.4)
0026
0027             SUBROUTINE ETOBLS (INSTG, OUTSTG)
0028
0029     C       CONVERTS AN EXPRESSION TO STANDARD BLISS EXPRESSION
0030     C       SYNTAX.
0031
0032             INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0134
0135             INTEGER INSTG(*),OUTSTG(*)
0136             INTEGER I, ICNT, J, K, L, M, N
0137
0138             K = 2
0139             J = 2
0140     2       IF (J .GT. (INSTG(1)+1)) GOTO 95
0141             DO 90 I = J, INSTG (1) + 1
0142             ICNT = I
0143             IF (INSTG (I) .NE. '<') GOTO 3
0144             OUTSTG (K) = '('
0145             GOTO 80
0146
0147     3       IF (INSTG (I) .NE. '>')  GOTO 6
0148             OUTSTG (K) = ')'
0149             GOTO 80
0150
0151     6       IF (INSTG (I) .NE. '@') GOTO 8
0152             OUTSTG (K) = '^'
0153             GOTO 80
0154
0155     8       IF (INSTG (I) .NE. '!') GOTO 10
0156             OUTSTG (K) = ' '
0157             K = K + 1
0158             OUTSTG (K) = 'O'
```

```
0159            K = K + 1
0160            OUTSTG (K) = 'R'
0161            K = K + 1
0162            OUTSTG (K) = ' '
0163            GOTO 80
0164
0165    10      IF (INSTG (I) .NE. '&') GOTO 15
0166            OUTSTG (K) = ' '
0167            K = K + 1
0168            OUTSTG (K) = 'A'
0169            K = K + 1
0170            OUTSTG (K) = 'N'
0171            K = K + 1
0172            OUTSTG (K) = 'D'
0173            K = K + 1
0174            OUTSTG (K) = ' '
0175            GOTO 80
0176
0177    15      IF ((INSTG (I) .NE. '^') .OR.
0178            1       (INSTG (I + 1) .NE. 'C')) GOTO 20
0179            OUTSTG (K) = ' '
0180            K = K + 1
0181            OUTSTG (K) = 'N'
0182            K = K + 1
0183            OUTSTG (K) = 'O'
0184            K = K + 1
0185            OUTSTG (K) = 'T'
0186            K = K + 1
0187            OUTSTG (K) = ' '
0188            GOTO 100
0189
0190    20      IF ((INSTG (I) .NE. '^') .OR.
0191            1       (INSTG (I + 1) .NE. 'B')) GOTO 35
0192            OUTSTG (K) = '%'
0193            K = K + 1
0194            OUTSTG (K) = 'B'
0195            K = K + 1
0196            OUTSTG (K) = '''
0197            K = K + 1
0198            L = 0
0199            DO 25 M = I + 2, INSTG (1) + 1
0200            IF ((INSTG (M) .NE. '1') .AND.
0201            1       (INSTG (M) .NE. '0')) GOTO 30
0202            L = L + 1
0203            OUTSTG (K) = INSTG (M)
0204            K = K + 1
0205    25      CONTINUE
0206    30      OUTSTG (K) = '''
0207            GOTO 110
0208
0209    35      IF ((INSTG (I) .NE. '^') .OR.
0210            1       (INSTG (I + 1) .NE. '0')) GOTO 50
0211            OUTSTG (K) = '%'
0212            K = K + 1
0213            OUTSTG (K) = '0'
0214            K = K + 1
0215            OUTSTG (K) = '''
```

```
0216            K = K + 1
0217            L = 0
0218            DO 40 M = I + 2, INSTG (1) + 1
0219            IF ((INSTG (M) .LT. '0') .AND.
0220            1       (INSTG (M) .GT. '7')) GOTO 45
0221            L = L + 1
0222            OUTSTG (K) = INSTG (M)
0223            K = K + 1
0224    40      CONTINUE
0225    45      OUTSTG (K) = ''''
0226            GOTO 110
0227
0228    50      IF ((INSTG (I) .NE. '^') .OR.
0229            1       (INSTG (I + 1) .NE. 'X')) GOTO 65
0230            OUTSTG (K) = '%'
0231            K = K + 1
0232            OUTSTG (K) = 'X'
0233            K = K + 1
0234            OUTSTG (K) = ''''
0235            K = K + 1
0236            L = 0
0237            DO 55 M = I + 2, INSTG (1) + 1
0238            IF (((INSTG (M) .LT. '0') .OR.
0239            1       (INSTG (M) .GT. '9')) .AND.
0240            2       ((INSTG (M) .LT. 'A') .OR.
0241            3       (INSTG (M) .GT. 'F'))) GOTO 60
0242            L = L + 1
0243            OUTSTG (K) = INSTG (M)
0244            K = K + 1
0245    55      CONTINUE
0246    60      OUTSTG (K) = ''''
0247            GOTO 110
0248
0249
0250    65      IF ((INSTG (I) .NE. '^') .OR.
0251            1       (INSTG (I + 1) .NE. 'A')) GOTO 75
0252            DELIM = INSTG(I+2)
0253            OUTSTG (K) = ''''
0254            K = K + 1
0255            L = 1
0256            DO 66 M = (I + 3), (INSTG (1) + 1)
0257            IF (INSTG (M) .EQ. DELIM) GOTO 67
0258            OUTSTG (K) = INSTG (M)
0259            K = K + 1
0260            L = L + 1
0261    66      CONTINUE
0262    67      OUTSTG (K) = ''''
0263            L = L + 1
0264            GOTO 110
0265
0266
0267    75      OUTSTG (K) = INSTG (I)
0268
0269    80      K = K + 1
0270    C       IF (DEBUG) TYPE 500, K, I, OUTSTG (K - 1), INSTG (I + 1)
0271    500     FORMAT (' OUTOFF ',I3,' INOFF ',I3,' CHAROUT ',A1,' NEXTCHAR ',A1)
0272
```

```
0273     90       CONTINUE
0274     95       OUTSTG (1) = K - 2
0275              RETURN
0276
0277     100      J = ICNT + 2
0278              K = K + 1
0279              GOTO 2
0280
0281     110      J = ICNT + 2 + L
0282              K = K + 1
0283              GOTO 2
0284              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	1001	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	58	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4958	

ENTRY POINTS

Address	Type	Name
0-00000000		ETOBLS

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	2-0000000E	I*2	DELIM	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL
11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT
5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ
2-00000000	I*2	I	2-00000002	I*2	ICNT	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN
10-000000A6	I*2	INPTR	2-00000004	I*2	J	2-00000006	I*2	K	2-00000008	I*2	L
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	2-0000000A	I*2	M	12-00000004	I*2	MAR
10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	2-0000000C	I*2	N
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEOL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNEOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)

```
10-0000019C  I*2  BLIBUF          240  (120)
 9-00000662  I*2  BLINCR          162  (81)
 6-0000017E  I*2  BLSSIZ           20  (10)
 9-000003D8  I*2  BVALUE          162  (81)
 6-000000EA  I*2  BYTSIZ           20  (10)
 6-000001B4  I*2  COMGBL           12  (6)
 6-000000C4  I*2  COMMAS            4  (2)
 6-00000112  I*2  CONBAS           20  (10)
 6-00000126  I*2  CONINC           20  (10)
 9-0000012C  I*2  CONPRE           32  (16)
 9-0000014C  I*2  CONTAG           32  (16)
 9-000007A6  I*2  CONTEX          198  (9, 11)
 6-000001D6  I*2  CPAREN            4  (2)
 6-000001D0  I*2  CPRCOM            6  (3)
 9-00000170  I*2  CVALUE          162  (81)
 6-0000004C  I*2  DEFEND           20  (10)
 6-00000022  I*2  DEFINI           20  (10)
 6-000001DE  I*2  DOLBIT           26  (13)
 6-000001F8  I*2  DOLBYT           28  (14)
 6-00000036  I*2  DOLDEF           12  (6)
 6-00000214  I*2  DOLFLD           24  (12)
 6-00000016  I*2  DOLGBL           12  (6)
 6-00000234  I*2  DOLLAR            4  (2)
 6-00000090  I*2  DOLVLD           18  (9)
 6-000000DE  I*2  DOTBLK           12  (6)
 6-00000042  I*2  DOTEQS           10  (5)
 6-00000000  I*2  DOTMAC           22  (11)
 6-00000060  I*2  ENDMAC           18  (9)
 6-000000B2  I*2  EQULST           18  (9)
 6-00000102  I*2  EQUTAB           12  (6)
 6-0000007E  I*2  EXCLSP           14  (7)
 6-00000230  I*2  EXPCLO            4  (2)
 6-0000022C  I*2  EXPOPN            4  (2)
 9-000000B8  I*2  FLDNAM           72  (36)
 6-000001B0  I*2  HYPHEN            4  (2)
10-00000000  I*2  INBUF           166  (83)
AP-00000004@  I*2  INSTG           **  (*)
 6-000000C8  I*2  LANHYP            6  (3)
 3-00000000  L*1  LINE            133  (133)
 6-0000013A  I*2  LITTAB           18  (9)
 6-0000015A  I*2  MACTAB           16  (8)
10-000000AA  I*2  MARBUF          240  (120)
 9-000005C0  I*2  MRBASE          162  (81)
 9-00000704  I*2  MRINCR          162  (81)
 9-00000336  I*2  MVALUE          162  (81)
 3-0000010A  L*1  NAME             32  (32)
 7-00000000  I*2  NEGSGN            4  (2)
 3-0000012A  L*1  NUMSTR          133  (133)
 6-000001DA  I*2  OASIGN            4  (2)
 6-0000016A  I*2  OFFSET           20  (10)
 6-000001A2  I*2  ONESHF            6  (3)
 6-0000010E  I*2  OPAREN            4  (2)
 9-000002CE  I*2  OSBNAM           32  (16)
 9-000002EE  I*2  OTGNAM           32  (16)
 9-0000030E  I*2  OUNTYP           32  (16)
AP-00000008@  I*2  OUTSTG           **  (*)
 6-0000019A  I*2  PCTSEM            8  (4)
```

3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-00000027	2	0-0000007A	3	0-0000008F	6	0-000000A4	8	0-000000E0	10	0-00000129	15
0-0000017B	20	**	25	0-000001F0	30	0-000001FE	35	**	40	0-0000027F	45
0-0000028D	50	**	55	0-00000324	60	0-00000332	65	**	66	0-00000397	67
0-000003A7	75	0-000003B6	80	**	90	0-000003C1	95	0-000003CC	100	0-000003D8	110
**	500'										

```
0001    C       REVISION HISTORY:
0002    C               29-06-77        TC      ROUTINE ADDED (2.4)
0003
0004            LOGICAL FUNCTION MTCHR(SRC,PNT,MCH)
0005
0006    C THIS SUBROUTINE CHECKS TO SEE IF THE STRING IN MCH MATCHES
0007    C THE STRING IN SRC STARTING AT PNT.
0008    C VARIABLES:
0009    C       I       --      INDEXES SRC
0010    C       J       --      INDEXES MCH
0011            INTEGER I,J,PNT
0012            INTEGER SRC(*),MCH(*)
0013
0014    C       INITILIZE
0015            I=PNT
0016            J=2
0017
0018    C       MAIN CODE
0019    10      IF (SRC(I) .NE. MCH(J)) GOTO 20
0020            J=J+1
0021            IF (J.GT. (MCH(1)+1)) GOTO 30
0022            I=I+1
0023            IF (I.GT. (SRC(1)+1)) GOTO 20
0024            GOTO 10
0025
0026    C       FAILURE
0027    20      MTCHR = .FALSE.
0028            RETURN
0029
0030    C       SUCCEED
0031    30      MTCHR = .TRUE.
0032            RETURN
0033            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	100	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	48	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	148	

ENTRY POINTS

Address	Type	Name
0-00000000	L*2	MTCHR

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name
2-00000000	I*2	I	2-00000002	I*2	J	AP-00000008@	I*2	PNT

ARRAYS

Address	Type	Name	Bytes	Dimensions
AP-0000000C@	I*2	MCH	**	(*)
AP-00000004@	I*2	SRC	**	(*)

LABELS

Address	Label	Address	Label	Address	Label
0-00000028	10	0-0000005D	20	0-00000060	30

PF

1

1

```
0001     C        REVISION HISTORY:
0002     C                29-06-77        TC      ROUTINE ADDED (2.4)
0003
0004              INTEGER FUNCTION ELIMPF(SRC,PNT,ARGSTR)
0005
0006     C        ELIMINATE THE PSEUDO-FUNCTION WHICH MAY START IN SRC AT PNT.
0007     C        PLACE THE ARGUMENT IN ARGSTR.  RETURN VALUES ACCORDING TO THE
0008     C        FOLLOWING SCHEME:
0009     C                0       --      NO PSEUDO-FUNCTION
0010     C                1       --      NO "(" FOUND
0011     C                2       --      NO ")" FOUND
0012     C                3       --      PSEUDO-FUNCTION WAS $BITPOSITION
0013     C                4       --      PSEUDO-FUNCTION WAS $BYTEOFFSET
0014     C                5       --      PSEUDO-FUNCTION WAS $FIELDWIDTH
0015     C        IF THE VALUE RETURNED US 3, 4 OR 5; PNT IS UPDATED TO POINT
0016     C        TO THE CHARACTER AFTER THE ")".  THIS MAY BE OFF THE END OF
0017     C        THE STRING.
0018     C        VARIABLES:
0019     C                I       --      INDEXES SRC
0020     C                J       --      INDEXES ARGSTR.
0021
0022              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0124
0125              INTEGER I,J,PNT
0126              INTEGER SRC(*),ARGSTR(*)
0127              LOGICAL MTCHR
0128
0129              I=PNT
0130              IF (MTCHR(SRC,I,DOLBIT)) GOTO 10
0131              IF (MTCHR(SRC,I,DOLBYT)) GOTO 20
0132              IF (MTCHR(SRC,I,DOLFLD)) GOTO 30
0133
0134     C        NOT A PSEUDO-FUNCTION
0135              ELIMPF=0
0136              RETURN
0137
0138     C        PSEUDO-FUNCTION IS $BITPOSITION
0139     10       ELIMPF=3
0140              I=I+DOLBIT(1)
0141              GOTO 40
0142
0143     C        PSEUDO-FUNCTION IS $BYTEOFFSET
0144     20       ELIMPF=4
0145              I=I+DOLBYT(1)
0146              GOTO 40
0147
0148     C        PSEUDO-FUNCTION IS $FIELDWIDTH
0149     30       ELIMPF=5
0150              I=I+DOLFLD(1)
0151
0152     C        LOOK FOR "(", SKIPPING ANY SPACES
0153     40       IF (I.GT.(SRC(1)+1))GOTO 50
0154              IF (SRC(I) .EQ. '(') GOTO 60
0155              IF ((SRC(I).NE.' ') .AND.
0156             1        (SRC(I).NE.'	')) GOTO 50
0157              I=I+1
0158              GOTO 40
```

```
0159
0160     C        COULDN'T FINE "("
0161     50       ELIMPF=1
0162              RETURN
0163
0164     C        LOOK FOR ")". MOVE CHARACTERS PASSED OVER TO ARGSTR
0165     60       J=2
0166              I=I+1
0167     70       IF (I.GT.(SRC(1)+1)) GOTO 80
0168              IF (SRC(I) .EQ. ')') GOTO 90
0169              ARGSTR(J)=SRC(I)
0170              I=I+1
0171              J=J+1
0172              GOTO 70
0173
0174     C        COULDN'T FIND ")"
0175     80       ELIMPF = 2
0176              RETURN
0177
0178     C        WE'RE DONE. CLEAN UP AND RETURN.
0179     90       ARGSTR(1)=J-2
0180              PNT=I+1
0181              RETURN
0182              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	259	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	96	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4254	

ENTRY POINTS

Address	Type	Name
0-00000000	I*2	ELIMPF

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	2-00000002	I*2	J
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM
9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	AP-00000008@	I*2	PNT
5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL
5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN
5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
AP-0000000C@	I*2	ARGSTR	**	(*)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-00C000D4	I*2	RANHYP	6	(3)

```
  9-0000021A  I*2  RSTLIN                180  (90)
  6-00000154  I*2  SEMSPC                  6  (3)
  6-000000FE  I*2  SPCSTG                  4  (2)
  6-000001A8  I*2  SPHYSP                  8  (4)
 AP-00000004@ I*2  SRC                    **  (*)
  9-00000092  I*2  STRSTG                 32  (16)
  6-00000072  I*2  SUFDEF                  8  (4)
  9-00000072  I*2  SUFNAM                 32  (16)
  6-0000014C  I*2  TABEQS                  8  (4)
  6-000000CE  I*2  TABLAN                  6  (3)
  6-000001CA  I*2  TABOPR                  6  (3)
  6-000001C0  I*2  TABPRN                 10  (5)
  6-000000AC  I*2  TABRAN                  6  (3)
  6-0000008C  I*2  TABSTG                  4  (2)
  9-00000100  I*2  TAGNAM                 32  (16)
  9-0000047A  I*2  TMPVAL                162  (81)
  9-00000000  I*2  TOKSTG                 80  (40)
  6-00000238  I*2  UNDVLD                 18  (9)
  6-0000007A  I*2  UNITYP                  4  (2)
  6-00000192  I*2  ZEROSG                  4  (2)
  6-000000A2  I*2  ZRLAHY                 10  (5)

LABELS

    Address   Label        Address   Label        Address   Label        Address   Label        Address   Label        Address   Label
  0-00000057  10         0-00000065  20         0-00000073  30         0-0000007F  40         0-000000AF  50         0-000000B3  60
  0-000000C2  70         0-000000EA  80         0-000000EE  90

FUNCTIONS AND SUBROUTINES REFERENCED

   Type  Name
    L*2  MTCHR
```

```
0001    C       REVISION HISTORY:
0002    C               29-06-77        TC      ROUTINE ADDED (2.4)
0003    C
0004    C               17-02-80                TIM HALVORSEN
0005    C                                       ALLOW _V_ AS WELL AS $V_
0006
0007            SUBROUTINE ETOMAR(SRC,DST)
0008
0009    C CONVERTS AN EXPRESSION TO STANDARD MARS SYNTAX.
0010    C THE FOLLOWING VARIABLES ARE USED:
0011    C       TMPSTG  --      HOLDS THE ARGUMENT TO A PSEUDO-FUNCTION
0012    C       I       --      INDEXES THE SOURCE STRING
0013    C       J       --      INDEXES THE DESTINATION STRING
0014    C       K       --      INDEXES TMPSTG
0015    C       CODE    --      RESULT FROM ELIMPF
0016
0017            INTEGER I,J,K,CODE
0018            INTEGER SRC(*),DST(*),TMPSTG(81)
0019            INTEGER ELIMPF
0020
0021    C       INITILIZE
0022            I=2
0023            J=2
0024
0025    C       MAIN LOOP (THIS IS A FOR LOOP WITH AN INITIAL CHECK)
0026    10      IF (I .GT. (SRC(1)+1)) GOTO 100
0027            IF (SRC(I) .NE. '$') GOTO 90
0028
0029    C       WE HAVE FOUND A DOLLAR SIGN.  IT MAY BE A PSEUDO-FUNCTION
0030            CODE = ELIMPF(SRC,I,TMPSTG)
0031    C       CODE=0 -- NOT A PSEUDO-FUNCTION
0032            IF (CODE .EQ. 0) GOTO 90
0033
0034    C       CODE=1 -- ERROR: NO OPEN PARENTHESIS
0035            IF (CODE .EQ. 1) GOTO 70
0036
0037    C       CODE=2 -- ERROR: NO CLOSE PARENTHESIS
0038            IF (CODE .EQ. 2) GOTO 60
0039
0040    C       CODE=3 -- PSEUDO-FUNCTION WAS $BITPOSITION
0041            IF (CODE .EQ. 3) GOTO 40
0042
0043    C       CODE=4 -- PSEUDO-FUNCTION WAS $BYTEOFFSET
0044            IF (CODE .EQ. 4) GOTO 40
0045
0046    C       CODE MUST EQUAL 5 -- PSEUDO-FUNCTION WAS $FIELDWIDTH
0047    C       WE MUST CHANGE "$V_" IN THE ARGUMENT TO "$S_"
0048            K=2
0049    20      IF (K .GT. TMPSTG(1)-1) GOTO 80
0050            IF (TMPSTG(K) .NE. '$' .AND. TMPSTG(K) .NE. '_') GOTO 30
0051            IF (TMPSTG(K+1) .NE. 'V') GOTO 30
0052            IF (TMPSTG(K+2) .NE. '_') GOTO 30
0053            TMPSTG(K+1)='S'
0054            GOTO 40
0055    30      K=K+1
0056            GOTO 20
0057
```

```
0058     C        COPY THE PSEUDO-FUNCTION ARGUMENT TO THE DESTINATION STRING
0059     40       K=2
0060     50       IF(K.GT.(TMPSTG(1)+1)) GOTO 10
0061              DST(J)=TMPSTG(K)
0062              J=J+1
0063              K=K+1
0064              GOTO 50
0065
0066     C        ERROR --
0067     60       TYPE 1000
0068     1000     FORMAT(' NO CLOSE PARENTHESIS FOR PSEUDO-FUNCTION')
0069              GOTO 90
0070
0071     C        ERROR --
0072     70       TYPE 1010
0073     1010     FORMAT(' NO OPEN PARENTHESIS FOR PSEUDO-FUNTION')
0074              GOTO 90
0075
0076     C        ERROR --
0077     80       TYPE 1020
0078     1020     FORMAT(' ARGUMENT TO $FIELDWIDTH IS NOT A VIELD')
0079              GOTO 40
0080
0081     C        JUST COPY THE CHARACTER FROM SOURCE TO DESTINATION
0082     90       DST(J)=SRC(I)
0083              J=J+1
0084              I=I+1
0085              GOTO 10
0086
0087     C        END OF THE LOOP
0088     100      DST(1)=J-2
0089              RETURN
0090              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	353	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	128	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	228	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	709	

ENTRY POINTS

Address	Type	Name
0-00000000		ETOMAR

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
2-000000A8	I*2	CODE	2-000000A2	I*2	I	2-000000A4	I*2	J	2-000000A6	I*2	K

ARRAYS

Address	Type	Name	Bytes	Dimensions
AP-00000008@	I*2	DST	**	(*)
AP-00000004@	I*2	SRC	**	(*)
2-00000000	I*2	TMPSTG	162	(81)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-00000027	10	0-0000007E	20	0-000000C3	30	0-000000C8	40	0-000000CC	50	0-000000F3	60
0-0000010C	70	0-00000125	80	0-0000013E	90	0-00000156	100	1-00000000	1000'	1-0000002C	1010'
1-00000056	1020'										

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
I*2	ELIMPF

```
0001     C       Version V02-001
0002     C
0003     C*****************************************************************************
0004     C*                                                                           *
0005     C*  COPYRIGHT (c) 1980                                                       *
0006     C*  BY DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASS.                         *
0007     C*                                                                           *
0008     C*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND  COPIED   *
0009     C*  ONLY  IN  ACCORDANCE  WITH  THE  TERMS  OF  SUCH  LICENSE AND WITH THE   *
0010     C*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE.  THIS SOFTWARE OR  ANY  OTHER   *
0011     C*  COPIES  THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY   *
0012     C*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE  IS  HEREBY   *
0013     C*  TRANSFERRED.                                                             *
0014     C*                                                                           *
0015     C*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE  WITHOUT  NOTICE   *
0016     C*  AND  SHOULD  NOT  BE  CONSTRUED  AS  A COMMITMENT BY DIGITAL EQUIPMENT   *
0017     C*  CORPORATION.                                                             *
0018     C*                                                                           *
0019     C*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR  RELIABILITY  OF  ITS   *
0020     C*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
0021     C*                                                                           *
0022     C*****************************************************************************
0023     C
0024     C       REVISION HISTORY:
0025     C               22-03-77        CP      ADD LOGIC AT LABEL 30 TO SEND LINE TO
0026     C                                       THE TMP FILE IF THIS IS A NEGATIVE
0027     C                                       FIELD DEFINITION.
0028     C               04-04-77        TC      ADD LOGIC TO KEEP TRACK OF MNGCNT
0029     C                                       (MAXIMUM NEGATIVE COUNT)
0030
0031             SUBROUTINE PFIELD
0032
0033     C       THIS ROUTINE IS CALLED WHEN A LINE HAS BEEN RECOGNIZED
0034     C       AS A FIELD DEFINITION. THE IMPLICIT ARGUMENT INPTR IS THE OFFSET
0035     C       TO THE NEXT CHARACTER TO BE READ IN THE INPUT LINE.
0036
0037     C       PFIELD COLLECTS THE ARGUMENTS OF THE FIELD DEFINITION,
0038     C       AND THEN OUTPUTS APPROPRIATE STATEMENTS TO THE BLISS
0039     C       AND MARS TRANSLATED FILES.
0040
0041             INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0143
0144     C       INITIALIZE THE DEFAULT VALUES FOR UNIT DESCRIPTOR,
0145     C       NUMBER OF BYTES PER UNIT, NUMBER OF UNITS, AND SIGN.
0146
0147             CALL INIFLD
0148
0149     C       GET THE FIRST TOKEN. VALID TOKENS ARE
0150     C       ALPHA (THE FIELDNAME) OR COMMA (MEANING THAT NO NAME
0151     C       IS BEING DEFINED, SPACE IS SIMPLY BEING RESERVED).
0152
0153             CALL GETTOK
0154             IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0155     500     FORMAT (' ',90A1)
0156             IF (TOKTYP .NE. ALPHA) GOTO 10
0157             CALL MOVSTG (TOKSTG, FLDNAM)
0158             IF (DEBUG) TYPE 500, (FLDNAM (I), I = 2, FLDNAM (1) + 1)
```

```
0159            CALL GETTOK
0160            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0161
0162    C       NAME, IF ANY, HAS BEEN SAVED. NOW LOOK FOR A UNIT
0163    C       DESCRIPTOR ARGUMENT. VALID CHARACTERS FOR THIS
0164    C       ARGUMENT ARE L, B, W, Q, AND T.
0165
0166    10      IF (DEBUG) TYPE 420, TOKTYP
0167            IF (TOKTYP .NE. COMMA) GOTO 25
0168            CALL GETTOK
0169            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0170            IF (TOKTYP .NE. ALPHA) GOTO 15
0171            CALL GETUND
0172            IF (UNDOK .EQ. .FALSE.) GOTO 100
0173            CALL GETTOK
0174            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0175
0176    C       UNIT DESCRIPTOR, IF ANY, HAS BEEN SAVED. NOW LOOK FOR
0177    C       THE SIZE ARGUMENT.
0178
0179    15      IF (DEBUG) TYPE 420, TOKTYP
0180    420     FORMAT (' TOKTYP IS ',I3)
0181            IF (TOKTYP .NE. COMMA) GOTO 25
0182            CALL GETTOK
0183            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0184            IF (TOKTYP .NE. NUMBER) GOTO 20
0185            FSIZ = INTVAL (TOKSTG)
0186            IF (FSIZ .EQ. -1) GOTO 110
0187            CALL GETTOK
0188            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0189
0190    C       SIZE OF FIELD, IF ANY, HAS BEEN SAVED. NOW LOOK FOR
0191    C       THE SIGN ARGUMENT.
0192
0193    20      IF (DEBUG) TYPE 420, TOKTYP
0194            IF (TOKTYP .NE. COMMA) GOTO 25
0195    C       IF (DEBUG) TYPE 430
0196    430     FORMAT (' GETTING SIGN')
0197            CALL GETTOK
0198            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0199            IF (TOKTYP .NE. ALPHA) GOTO 25
0200            IF (TOKSTG (1) .NE. 1) GOTO 120
0201            IF (TOKSTG (2) .NE. 'S') GOTO 120
0202            FSIGN = 1
0203            ASIGN (2) = '1'
0204            INPTR = INPTR - 1
0205            GOTO 30
0206
0207    C       THE OFFSET INTO THE INPUT BUFFER IS OFF BY ONE CHARACTER
0208    C       BECAUSE SOME TRAILING OPTIONAL ARGUMENTS WERE OMITTED.  BACK
0209    C       UP THE OFFSET BY ONE.
0210
0211    25      INPTR = LASTNB (INPTR - 2)
0212
0213    C       IF THIS IS A NEGATIVE FIELD DECLARATION, OUTPUT IT
0214    C       TO THE TMP FILE.
0215
```

```
0216     30       IF (POSOFF) GOTO 40
0217              IF ((.NOT. TMPOUT) .AND. (FLDLAS)) CALL CHKALC
0218              IF (.NOT. TMPOUT) GOTO 35
0219              NEGCNT = NEGCNT + FSIZ * UNISIZ
0220              MNGCNT = MAX0(NEGCNT,MNGCNT)
0221              CALL OUT2LN
0222              RETURN
0223
0224     35       NEGCNT = FSIZ * UNISIZ
0225              MNGCNT = NEGCNT
0226              TMPOUT = .TRUE.
0227              CALL OUT2LN
0228              RETURN
0229
0230     40       IF (.NOT. TMPOUT) GOTO 45
0231              CALL OUT2LN
0232              CALL STANEG
0233              RETURN
0234
0235     C        FIELDS ARE ALL COLLECTED. NOW OUTPUT LINES TO
0236     C        BLISS AND MARS.
0237
0238     45       SOFSET = 0
0239              FLDLAS = .TRUE.
0240              LFDSIZ = FSIZ * UNISIZ
0241              LSBSIZ = 0
0242              CALL SAVSBA
0243              INBUF (INPTR) = INBUF (1) - INPTR + 1
0244              CALL GETREM (INPTR)
0245              CALL OUTFLD
0246              RETURN
0247
0248     C        ERROR REPORTING                                                1
0249
0250     100      TYPE 1000
0251     1000     FORMAT (' INVALID UNIT DESCRIPTOR IN FIELD DEFINITION')
0252              RETURN
0253                                                                             1
0254     110      TYPE 1100
0255     1100     FORMAT (' INVALID SIZE IN FIELD DEFINITION')
0256              RETURN
0257
0258     120      TYPE 1200
0259     1200     FORMAT (' INVALID SIGN ARGUMENT IN FIELD DEFINITION')
0260              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	1058	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	152	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	72	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	5181	

ENTRY POINTS

Address	Type	Name
0-00000000		PFIELD

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-000000E2	10	0-0000019F	15	0-0000025D	20	0-000002F2	25	0-00000310	30	0-00000364	35
0-00000381	40	0-00000395	45	0-000003DA	100	0-000003F2	110	0-0000040A	120	1-00000008	420'
**	430'	1-00000000	500'	1-00000018	1000'	1-00000047	1100'	1-0000006B	1200'		

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	CHKALC		GETREM		GETTOK		GETUND		INIFLD	I*2	INTVAL
I*2	LASTNB		MOVSTG		OUT2LN		OUTFLD		SAVSBA		STANEG

```
0001            SUBROUTINE PSBFLD
0002
0003    C       THIS ROUTINE IS CALLED WHEN A LINE HAS BEEN RECOGNIZED
0004    C       AS A SUBFIELD DEFINITION. THE IMPLICIT ARGUMENT
0005    C       INPTR IS THE OFFSET TO THE NEXT CHARACTER IN THE INPUT LINE.
0006
0007    C       PSBFLD COLLECTS THE NAME OF THE SUBFIELD, THE OFFSET,
0008    C       THE UNIT, THE SIZE, AND THE SIGN. THEN IT OUTPUTS
0009    C       APPROPRIATE STATEMENTS TO THE BLISS AND MARS TRANSLATED FILES.
0010
0011            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0113
0114            INTEGER LOCAL, COUNT, OSFSET
0115
0116    C       INITIALIZE THE OFFSET, UNIT TYPE, SIZE, SIGN, AND
0117    C       NAME FIELDS
0118
0119            LOCAL = -1
0120            CALL INIFLD
0121
0122    C       PICK UP THE NAME TOKEN
0123
0124            CALL GETTOK
0125            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0126    500     FORMAT (' ',90A1)
0127            IF (TOKTYP .NE. ALPHA) GOTO 10
0128            CALL MOVSTG (TOKSTG, FLDNAM)
0129            CALL GETTOK
0130            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0131
0132    C       NAME, IF ANY, IS RETRIEVED. NOW CHECK FOR AN OFFSET ARGUMENT.
0133
0134    10      IF (DEBUG) TYPE 420, TOKTYP
0135    420     FORMAT (' TOKTYP IS ',I3)
0136            IF (TOKTYP .NE. COMMA) GOTO 30
0137            CALL GETTOK
0138            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0139            IF (TOKTYP .NE. NUMBER) GOTO 15
0140            LOCAL = INTVAL (TOKSTG)
0141            IF (DEBUG) TYPE 310, LOCAL, SOFSET, LSBSIZ
0142    310     FORMAT (' OFFSET ',I3,' SOFSET ',I3,' LSBSIZ ',I3)
0143            IF (LOCAL .EQ. -1) GOTO 100
0144            IF ((LOCAL + BOFSET) .LT. BLFOFS) GOTO 105
0145
0146    C       NOW LOOK FOR A UNIT DESCRIPTOR FIELD.
0147
0148            CALL GETTOK
0149            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0150
0151    C       OFFSET ARGUMENT, IF ANY, HAS BEEN COLLECTED. NOW LOOK FOR
0152    C       A UNIT DESCRIPTOR ARGUMENT.
0153
0154    15      IF (DEBUG) TYPE 420, TOKTYP
0155            IF (TOKTYP .NE. COMMA) GOTO 30
0156            CALL GETTOK
0157            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0158            IF (TOKTYP .NE. ALPHA) GOTO 20
```

```
0159            CALL GETUND (TOKSTG)
0160            IF (UNDOK .EQ. .FALSE.) GOTO 110
0161            CALL GETTOK
0162            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0163
0164    C       UNIT DESCRIPTOR, IF ANY, HAS BEEN SAVED. NOW LOOK FOR
0165    C       THE SIZE ARGUMENT.
0166
0167    20      IF (DEBUG) TYPE 420, TOKTYP
0168            IF (TOKTYP .NE. COMMA) GOTO 30
0169            CALL GETTOK
0170            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0171            IF (TOKTYP .NE. NUMBER) GOTO 25
0172            FSIZ = INTVAL (TOKSTG)
0173            IF (FSIZ .EQ. -1) GOTO 120
0174            CALL GETTOK
0175            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0176
0177    C       SIZE OF SUBFIELD, IF ANY, HAS BEEN SAVED. NOW
0178    C       LOOK FOR THE SIGN ARGUMENT.
0179
0180    25      IF (DEBUG) TYPE 420, TOKTYP
0181            IF (TOKTYP .NE. COMMA) GOTO 30
0182            CALL GETTOK
0183            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0184            IF (TOKTYP .NE. ALPHA) GOTO 30
0185            IF (TOKSTG (1) .NE. 1) GOTO 130
0186            IF (TOKSTG (2) .NE. 'S') GOTO 130
0187            FSIGN = 1
0188            ASIGN (2) = '1'
0189            INPTR = INPTR - 1
0190            GOTO 35
0191
0192    C       FIELDS ARE ALL COLLECTED. NOW OUTPUT LINES TO BLISS AND
0193    C       MARS, AND UPDATE SUBFIELD OFFSET COUNTER. IF SOME
0194    C       TRAILING FIELDS WERE OMITTED, THE INPUT LINE POINTER
0195    C       IS ONE CHARACTER TOO FAR. BACK IT UP TO THE CORRECT
0196    C       POSITION.
0197
0198    30      INPTR = LASTNB (INPTR - 2)
0199
0200    35      IF (DEBUG) TYPE 430, BLFOFS, LSBSIZ, FOFSET, SOFSET
0201    430     FORMAT (' BLFOFS ',I3,' LSBSIZ ',I3,' FOFSET ',I3,' SOFSET ',I3)
0202
0203    C       SEE WHAT SORT OF ALLOCATION TO DO.
0204
0205            IF (LOCAL .EQ. -1) GOTO 40
0206            IF (LOCAL .GT. SOFSET) GOTO 45
0207            IF (LOCAL .LT. SOFSET) GOTO 50
0208
0209    C       IN THIS CASE, THE OFFSET SPECIFIED IS EQUAL TO THE
0210    C       CURRENT SUBFIELD OFFSET. JUST OUTPUT THE SIZE OF THE LAST SUBFIELD,
0211    C       IF ANY.
0212
0213            IF (DEBUG) TYPE 440, LSBSIZ
0214    440     FORMAT (' OFFSET REMAINS SAME, OUTPUT LSBSIZ ',I3)
0215            IF (LSBSIZ .NE. 0) CALL OUTBLK (LSBSIZ)
```

```
0216            GOTO 60
0217
0218    C       HERE, NO OFFSET WAS SPECIFIED, JUST OUTPUT THE SIZE OF THE
0219    C       LAST SUBFIELD.
0220
0221    40      IF (DEBUG) TYPE 450, LSBSIZ
0222    450     FORMAT (' NO OFFSET SPECIFIED, OUTPUT LSBSIZ ',I3)
0223            IF (LSBSIZ .NE. 0) CALL OUTBLK (LSBSIZ)
0224            GOTO 60
0225
0226    C       HERE, THE OFFSET SPECIFIED WAS GREATER THAN THE CURRENT
0227    C       SUBFIELD OFFSET. OUTPUT THE SIZE OF THE LAST FIELD, AND THEN
0228    C       OUTPUT THE ADDITIONAL BYTES TO BRING IT UP TO THE SPECIFIED
0229    C       OFFSET.
0230
0231    45      IF (DEBUG) TYPE 460, LOCAL, LSBSIZ
0232    460     FORMAT (' OFFSET SPECIFIED IS ',I3,' OUTPUT LSBSIZ ',I3)
0233            IF (LSBSIZ .NE. 0) CALL OUTBLK (LSBSIZ)
0234            COUNT = LOCAL - SOFSET
0235            IF (DEBUG) TYPE 470, COUNT
0236    470     FORMAT (' NOW ADDITIONAL SIZE OF ',I3)
0237            IF (COUNT .NE. 0) CALL OUTBLK (COUNT)
0238            SOFSET = LOCAL
0239            GOTO 60
0240
0241    C       HERE, THE OFFSET SPECIFIED WAS LESS THAN THE CURRENT
0242    C       SUBFIELD OFFSET. REDUCE THE CURRENT OFFSET TO THAT SPECIFIED.
0243    C       COMPUTE THE NOW REDUCED SIZE OF THE LAST SUBFIELD, AND ALLOCATE
0244    C       THAT AMOUNT.
0245
0246    50      IF (DEBUG) TYPE 480, LOCAL, LSBSIZ
0247    480     FORMAT (' REDUCED OFFSET IS ',I3,', LAST LSBSIZ IS ',I3)
0248            OSFSET = SOFSET - LSBSIZ
0249            SOFSET = LOCAL
0250            LSBSIZ = SOFSET - OSFSET
0251            IF (DEBUG) TYPE 490, LSBSIZ
0252    490     FORMAT (' NEW LSBSIZ IS ',I3)
0253            IF (LSBSIZ .NE. 0) CALL OUTBLK (LSBSIZ)
0254            GOTO 60
0255
0256    C       NOW SET UP ALL THE FIELDS AND OUTPUT THE FIELD NAME.
0257
0258    60      IF ((SOFSET + (FSIZ * UNISIZ)) .GT. LFDSIZ) GOTO 125
0259            FLDLAS = .TRUE.
0260            LSBSIZ = FSIZ * UNISIZ
0261            CALL SAVSBA
0262            INBUF (INPTR) = INBUF (1) - INPTR + 1
0263            CALL GETREM (INPTR)
0264            CALL OUTFLD
0265            RETURN
0266
0267    C       ERROR REPORTING
0268
0269    100     TYPE 1000
0270    1000    FORMAT (' INVALID OFFSET IN SUBFIELD DEFINITION')
0271            RETURN
0272
```

```
0273     105     TYPE 1010
0274     1010    FORMAT (' SUBFIELD OFFSET OUT OF ORDER')
0275             RETURN
0276
0277     110     TYPE 1100
0278     1100    FORMAT (' INVALID UNIT DESCRIPTOR IN SUBFIELD DEFINITION')
0279             RETURN
0280
0281     120     TYPE 1200
0282     1200    FORMAT (' INVALID SIZE IN SUBFIELD DEFINITION')
0283             RETURN
0284
0285     125     TYPE 1210
0286     1210    FORMAT (' SUBFIELD SIZE TOO LARGE')
0287             RETURN
0288
0289     130     TYPE 1300
0290     1300    FORMAT (' INVALID SIGN ARGUMENT IN SUBFIELD DEFINITION')
0291             RETURN
0292             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	1750	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	568	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	76	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	6293	

ENTRY POINTS

Address	Type	Name
0-00000000		PSBFLD

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
2-00000002	I*2	COUNT	8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL
11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT
5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ
2-00000006	I*2	I	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
2-00000000	I*2	LOCAL	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR
10-0000019A	I*2	MARPTR	12-000000CC	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	2-00000004	I*2	OSFSET
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-00000308	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)

6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-000000B0	10	0-000001C0	15	0-0000027E	20	0-0000033C	25	0-000003D1	30	0-000003EF	35
0-00000493	40	0-000004CE	45	0-0000055F	50	0-000005EC	60	0-00000646	100	0-0000065E	105
0-00000676	110	0-0000068E	120	0-000006A6	125	0-000006BE	130	1-00000018	310'	1-00000008	420'
1-0000003D	430'	1-0000006E	440'	1-00000097	450'	1-000000C0	460'	1-000000ED	470'	1-0000010A	480'
1-00000137	490'	1-00000000	500'	1-0000014B	1000'	1-00000174	1010'	1-00000194	1100'	1-000001C6	1200'
1-000001ED	1210'	1-00000208	1300'								

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	GETREM		GETTOK		GETUND		INIFLD	I*2	INTVAL	I*2	LASTNB
	MOVSTG		OUTBLK		OUTFLD		SAVSBA				

```
0001     C       Version V02-001
0002     C
0003     C*****************************************************************************
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0021     C*                                                                           *
0022     C*****************************************************************************
0023     C
0024     C       MDL MAINLINE
0025     C
0026             INCLUDE 'SRC$:MDL32CMN.CMN'
0128     C
0129     C       INITIALISE
0130     C
0131             INP = 2
0132             MAR = 1
0133             BLI = 3
0134             TMP = 4
0135             MAS = 8
0136     C
0137             CALL INISTG
0138             CALL GETCMD
0139             END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	46	PIC CON REL LCL SHR EXE RD NOWRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3945	

ENTRY POINTS

Address	Type	Name
0-00000000		MDL32CMN$MAIN

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)

9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-00000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)

6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	GETCMD		INISTG

NU

LA

```
0001            BLOCK DATA
0002      C
0003      C INITIALISE STATIC DATA FOR MDL
0004      C
0005            INCLUDE 'SRC$:MDL32CMN.CMN'
0107            DATA BLANK,TAB,EOLCH/' ','      ',0/
0108            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
1	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
2	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
3	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3899	

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
1-00000006	I*4	BINVAL	8-00000000	I*2	BLANK	6-00000212	I*2	BLBITS	6-00000332	I*2	BLFOFS
9-00000002	I*2	BLI	7-0000028C	I*2	BLIPTR	2-00000012	L*2	BLKOUT	6-0000012A	I*2	BOFSET
6-0000016C	I*2	CBASE	6-0000016E	I*2	CINCR	1-00000004	I*2	COL	2-00000016	L*2	CONEXP
5-00000000	I*2	DEBUG	2-00000014	L*2	ENDEXP	2-00000000	L*2	ENDFIL	8-00000004	I*2	EOLCH
9-00000008	I*2	ERR	2-00000002	L*2	ERROR	2-0000000E	L*2	ERROUT	2-00000010	L*2	FLDLAS
6-00000122	I*2	FOFSET	6-000000B6	I*2	FSIGN	6-000000B4	I*2	FSIZ	9-00000000	I*2	INP
7-000000A8	I*2	INPLIN	7-000000A6	I*2	INPTR	6-0000051C	I*2	LASLIN	6-00000216	I*2	LFDSIZ
1-0000000A	I*2	LINELEN	6-00000126	I*2	LINTYP	6-00000218	I*2	LPTR	6-00000214	I*2	LSBSIZ
9-00000004	I*2	MAR	7-0000019A	I*2	MARPTR	9-0000000C	I*2	MAS	6-0000086E	I*2	MNGCNT
6-0000086C	I*2	NEGCNT	1-00000000	I*4	NUM	6-00000334	I*2	OBBITS	6-0000032E	I*2	OFSIZ
6-00000330	I*2	OUNSIZ	2-00000018	L*2	POSOFF	2-0000000C	L*2	SMASK	6-00000120	I*2	SOFSET
2-00000004	L*2	STGEQL	2-00000006	L*2	STROK	8-00000002	I*2	TAB	9-00000006	I*2	TMP
2-0000001C	L*2	TMPIN	2-0000001A	L*2	TMPOUT	6-00000050	I*2	TOKTYP	9-0000000A	I*2	TTY
2-00000008	L*2	UNDOK	6-000000B2	I*2	UNISIZ	2-0000000A	L*2	VMASK	6-00000124	I*2	VOFSET
6-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
3-000000DA	I*2	AMASK	4	(2)
3-00000196	I*2	ASIGN	4	(2)
6-0000051E	I*2	BLBASE	162	(81)

7-0000019C	I*2	BLIBUF	240	(120)	00
6-00000662	I*2	BLINCR	162	(81)	00
3-0000017E	I*2	BLSSIZ	20	(10)	00
6-000003D8	I*2	BVALUE	162	(81)	00
3-000000EA	I*2	BYTSIZ	20	(10)	00
3-000001B4	I*2	COMGBL	12	(6)	00
3-000000C4	I*2	COMMAS	4	(2)	00
3-00000112	I*2	CONBAS	20	(10)	00
3-00000126	I*2	CONINC	20	(10)	00
6-0000012C	I*2	CONPRE	32	(16)	00
6-0000014C	I*2	CONTAG	32	(16)	00
6-000007A6	I*2	CONTEX	198	(9, 11)	00
3-000001D6	I*2	CPAREN	4	(2)	00
3-000001D0	I*2	CPRCOM	6	(3)	00
6-00000170	I*2	CVALUE	162	(81)	00
3-0000004C	I*2	DEFEND	20	(10)	00
3-00000022	I*2	DEFINI	20	(10)	00
3-000001DE	I*2	DOLBIT	26	(13)	00
3-000001F8	I*2	DOLBYT	28	(14)	01
3-00000036	I*2	DOLDEF	12	(6)	01
3-00000214	I*2	DOLFLD	24	(12)	01
3-00000016	I*2	DOLGBL	12	(6)	01
3-00000234	I*2	DOLLAR	4	(2)	01
3-00000090	I*2	DOLVLD	18	(9)	01
3-000000DE	I*2	DOTBLK	12	(6)	01
3-00000042	I*2	DOTEQS	10	(5)	01
3-00000000	I*2	DOTMAC	22	(11)	01
3-00000060	I*2	ENDMAC	18	(9)	01
3-000000B2	I*2	EQULST	18	(9)	01
3-00000102	I*2	EQUTAB	12	(6)	01
3-0000007E	I*2	EXCLSP	14	(7)	01
3-00000230	I*2	EXPCLO	4	(2)	01
3-0000022C	I*2	EXPOPN	4	(2)	01
6-000000B8	I*2	FLDNAM	72	(36)	01
3-000001B0	I*2	HYPHEN	4	(2)	01
7-00000000	I*2	INBUF	166	(83)	01
3-000000C8	I*2	LANHYP	6	(3)	01
0-00000000	L*1	LINE	133	(133)	01
3-0000013A	I*2	LITTAB	18	(9)	01
3-0000015A	I*2	MACTAB	16	(8)	01
7-000000AA	I*2	MARBUF	240	(120)	01
6-000005C0	I*2	MRBASE	162	(81)	01
6-00000704	I*2	MRINCR	162	(81)	01
6-00000336	I*2	MVALUE	162	(81)	01
0-0000010A	L*1	NAME	32	(32)	01
4-00000000	I*2	NEGSGN	4	(2)	01
0-0000012A	L*1	NUMSTR	133	(133)	01
3-000001DA	I*2	OASIGN	4	(2)	01
3-0000016A	I*2	OFFSET	20	(10)	01
3-000001A2	I*2	ONESHF	6	(3)	01
3-0000010E	I*2	OPAREN	4	(2)	01
6-000002CE	I*2	OSBNAM	32	(16)	01
6-000002EE	I*2	OTGNAM	32	(16)	01
6-0000030E	I*2	OUNTYP	32	(16)	01
3-0000019A	I*2	PCTSEM	8	(4)	01
0-00000085	L*1	PREFIX	133	(133)	01
6-00000052	I*2	PRENAM	32	(16)	

3-000000D4	I*2	RANHYP	6	(3)
6-0000021A	I*2	RSTLIN	180	(90)
3-00000154	I*2	SEMSPC	6	(3)
3-000000FE	I*2	SPCSTG	4	(2)
3-000001A6	I*2	SPHYSP	8	(4)
6-00000092	I*2	STRSTG	32	(16)
3-00000072	I*2	SUFDEF	8	(4)
6-00000072	I*2	SUFNAM	32	(16)
3-0000014C	I*2	TABEQS	8	(4)
3-000000CE	I*2	TABLAN	6	(3)
3-000001CA	I*2	TABOPR	6	(3)
3-000001C0	I*2	TABPRN	10	(5)
3-000000AC	I*2	TABRAN	6	(3)
3-0000008C	I*2	TABSTG	4	(2)
6-00000100	I*2	TAGNAM	32	(16)
6-0000047A	I*2	TMPVAL	162	(81)
6-00000000	I*2	TOKSTG	80	(40)
3-00000238	I*2	UNDVLD	18	(9)
3-0000007A	I*2	UNITYP	4	(2)
3-00000192	I*2	ZEROSG	4	(2)
3-000000A2	I*2	ZRLAHY	10	(5)

```
0001     C       Version V02-001
0002     C
0003     C*****************************************************************************
0004     C*                                                                           *
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0020     C*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
0021     C*                                                                           *
0022     C*****************************************************************************
0023     C
0024     C REVISION HISTORY:
0025     C       22-03-77        CP      ADD TMP FILE OPEN AND CLOSE.
0026     C
0027     C  VARIABLES:
0028     C
0029     C       BLINAM--OUTPUT FILE SPECIFICATION FOR BLISS.
0030     C       INPNAM--INPUT FILE SPECIFICATION
0031     C       ISWTCH--VALUE OF SWITCHES SPECIFIED WITH INPUT FILE SPECIFICATION
0032     C       MARNAM--OUTPUT FILE SPECIFICATION FOR MARS
0033     C       OSWTCH--VALUE OF SWITCHES SPECIFIED WITH OUTPUT FILE SPECIFICATION
0034     C       TMPNAM--TMP FILE SPECIFICATION.
0035     C
0036     C
```

GE
10
10

```
0037              SUBROUTINE GETCMD
0038     C
0039     C        INCLUDE COMMON FILE
0040     C
0041              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0143     C
0144     C        DATA DECLARATIONS
0145     C
0146              CHARACTER*80 INPNAM,MARNAM,BLINAM
0147              CHARACTER*132 COMLINE
0148     C
0149     C        GET COMMAND LINE PARAMETERS.
0150     C
0151              IERR=LIB$GET_FOREIGN(COMLINE,'MDL>',LLEN)
0152     50       CONTINUE
0153              IF ((IERR.AND.1).EQ.0) CALL LIB$STOP(%VAL(IERR))
0154              EQSIGN=INDEX(COMLINE,'=')
0155              IF (EQSIGN.EQ.0) STOP 'No input'
0156              INPNAM=COMLINE(EQSIGN+1:LLEN)
0157              I=INDEX(INPNAM,']')
0158              IF (I.EQ.0) I=INDEX(INPNAM,'>')
0159              IF (INDEX(INPNAM(I+1:80),'.').NE.0) GOTO 60
0160              INPNAM(77:80)='.MDL'
0161     C
0162     C        SET UP OUTPUT FILE SPECIFICATIONS.
0163     C
0164     60       IF (EQSIGN.EQ.1) THEN
0165                MARNAM=INPNAM
0166                BLINAM=INPNAM
0167                I=INDEX(INPNAM(I+1:80),'.')
0168                MARNAM(I:I+3)='.MAR'
0169                BLINAM(I:I+3)='.B32'
0170               ELSE
0171                ENDOUT=INDEX(COMLINE,',')
0172                IF (ENDOUT.EQ.0) ENDOUT=EQSIGN
0173                MARNAM=COMLINE(1:ENDOUT-1)
0174                IF (ENDOUT.EQ.EQSIGN) THEN
0175                  BLINAM=MARNAM
0176                 ELSE
0177                  BLINAM=COMLINE(ENDOUT+1:EQSIGN-1)
0178                ENDIF
0179              ENDIF
0180              I=INDEX(MARNAM,']')
0181              IF (I.EQ.0) I=INDEX(MARNAM,'>')
0182              IF (INDEX(MARNAM(I+1:80),'.').EQ.0) MARNAM(77:80)='.MAR'
0183              I=INDEX(BLINAM,']')
0184              IF (I.EQ.0) I=INDEX(BLINAM,'>')
0185              IF (INDEX(BLINAM(I+1:80),'.').EQ.0) BLINAM(77:80)='.B32'
0186     C
0187     C        CREATE A NAME FOR THE BLISS OUTPUT FILE THAT IS THE SAME AS
0188     C        FOR THE MARS OUTPUT FILE EXCEPT THAT THE EXTENSION IS .B32.
0189     C
0190     C        OPEN A TEMP FILE TO PUT THE FIRST PASS OF THE MARS OUTPUT IN.
0191     C
0192     C        OPEN A TEMP FILE TO ALLOW HANDLING OF NEGATIVE FIELDS.
0193     C
0194     C        OPEN AND PROCESS THE FILES.
```

```
0195    C
0196            OPEN( UNIT=INP,TYPE='OLD',NAME=INPNAM,
0197            1       ACCESS='SEQUENTIAL',READONLY,ERR=500)
0198            OPEN( UNIT=MAR,TYPE='SCRATCH',NAME='SYS$LOGIN:MAROUT.TMP',
0199            1       ACCESS='SEQUENTIAL',ERR=530)
0200            OPEN( UNIT=MAS,TYPE='NEW',NAME=MARNAM,CARRIAGECONTROL='LIST',
0201            1       ACCESS='SEQUENTIAL',ERR=510)
0202            OPEN( UNIT=BLI,TYPE='NEW',NAME=BLINAM,!CARRIAGECONTROL='NONE',
0203            1       ACCESS='SEQUENTIAL',ERR=520)
0204            OPEN( UNIT=TMP,TYPE='SCRATCH',NAME='SYS$LOGIN:NEGFLD.TMP',
0205            1       FORM='UNFORMATTED',ACCESS='SEQUENTIAL',ERR=530)
0206            ENDFIL = .FALSE.
0207    100     CALL STPROC
0208            IF (.NOT. ENDFIL) GOTO 100
0209            CLOSE (UNIT = BLI)
0210            CLOSE (UNIT = INP)
0211            CLOSE (UNIT = TMP, DISPOSE='DELETE')
0212            REWIND (UNIT = MAR)
0213            CALL REAREND
0214            CLOSE (UNIT = MAR, DISPOSE='DELETE')
0215            CLOSE (UNIT = MAS)
0216            CALL EXIT
0217    C
0218    C       ERROR OPENING INPUT FILE
0219    C
0220    500     TYPE 1010
0221    1010    FORMAT (' %MDL-F-Error opening input file')
0222            RETURN
0223
0224    510     TYPE 1020
0225    1020    FORMAT (' %MDL-F-Error opening mars output file')
0226            RETURN
0227
0228    520     TYPE 1030
0229    1030    FORMAT (' %MDL-F-Error opening bliss output file')
0230            RETURN
0231
0232    530     TYPE 1040
0233    1040    FORMAT (' %MDL-F-Error opening temp file')
0234            RETURN
0235
0236            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	795	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	229	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	888	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	5811	

ENTRY POINTS

Address	Type	Name
0-00000000		GETCMD

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	2-000000A0	CHAR	BLINAM	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT
9-0000012A	I*2	BOFSET	9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL
2-000000F0	CHAR	COMLINE	5-00000016	L*2	CONEXP	8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP
5-00000000	L*2	ENDFIL	2-0000017C	I*2	ENDOUT	11-00000004	I*2	EOLCH	2-00000178	I*2	EQSIGN
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-0000017A	I*2	I
2-00000174	I*2	IERR	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	2-00000000	CHAR	INPNAM
10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN
9-00000126	I*2	LINTYP	2-00000176	I*2	LLEN	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	2-00000050	CHAR	MARNAM	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)

6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	50	0-000000AF	60	0-00000263	100	0-0C0002BB	500	0-000002D3	510	0-000002EB	520
0-00000303	530	1-00000041	1010'	1-00000064	1020'	1-0000008D	1030'	1-000000B7	1040'		

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	FOR$CLOSE		FOR$EXIT		FOR$OPEN
I*2	LIB$GET_FOREIGN	I*4	LIB$INDEX		LIB$STOP
	REAREND		STPROC		

```
0001              SUBROUTINE LITSTG(CS,LS,NC)
0002     C
0003     C        CONVERT LITERAL STRING TO COUNTED STRING
0004     C
0005              IMPLICIT INTEGER(A-Z)
0006              INTEGER LS(*),CS(*),A(30)
0007     C
0008              N = NC/2+1
0009              ENCODE(60,100,A) (LS(I),I=1,N)
0010     100      FORMAT(20A2)
0011              DECODE(60,200,A) (CS(I),I=2,NC+1)
0012     200      FORMAT(150A1)
0013              CS(1) = NC
0014              RETURN
0015              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	171	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	11	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	104	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	286	

ENTRY POINTS

Address	Type	Name
0-00000000		LITSTG

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name
2-0000003E	I*2	I	2-0000003C	I*2	N	AP-0000000C@	I*2	NC

ARRAYS

Address	Type	Name	Bytes	Dimensions
2-00000000	I*2	A	60	(30)
AP-00000004@	I*2	CS	**	(*)
AP-00000008@	I*2	LS	**	(*)

LABELS

Address	Label	Address	Label
1-00000000	100'	1-00000005	200'

```
0001
0002            SUBROUTINE NUMSTG(CS,X)
0003    C
0004    C       CONVERT INTEGER TO COUNTED STRING
0005    C
0006            IMPLICIT INTEGER(A-Z)
0007            INTEGER CS(*),A(10),B(10)
0008            ENCODE(20,100,A) X
0009    100     FORMAT(I10)
0010            DECODE(10,200,A) B
0011    200     FORMAT(10A1)
0012            DO 10 I = 1,10
0013    10      IF(B(I).NE.' ')GOTO 20
0014    20      CS(1)=11-I
0015            DO 30 J=I,10
0016    30      CS(J-I+2) = B(J)
0017            RETURN
0018            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	163	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	8	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	80	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	251	

ENTRY POINTS

Address	Type	Name
0-00000000		NUMSTG

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name
2-00000028	I*2	I	2-0000002A	I*2	J	AP-00000008@	I*2	X

ARRAYS

Address	Type	Name	Bytes	Dimensions
2-00000000	I*2	A	20	(10)
2-00000014	I*2	B	20	(10)
AP-00000004@	I*2	CS	**	(*)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	10	0-00000072	20	**	30	1-00000000	100'	1-00000003	200'

```
0001     C       Version V02-001
0002     C
0003     C*****************************************************************************
0004     C*                                                                           *
0005     C*  Copyright (c) 1980                                                       *
0006     C*  by DIGITAL Equipment Corporation, Maynard, Mass.                         *
0007     C*                                                                           *
0008     C*  This software is furnished under a license and may be used and  copied   *
0009     C*  only  in  accordance  with  the  terms  of  such  license and with the   *
0010     C*  inclusion of the above copyright notice.  This software or  any  other   *
0011     C*  copies  thereof may not be provided or otherwise made available to any   *
0012     C*  other person.  No title to and ownership of  the  software  is  hereby   *
0013     C*  transferred.                                                             *
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0015     C*  The information in this software is subject to change  without  notice   *
0016     C*  and  should  not  be  construed  as  a commitment by DIGITAL Equipment   *
0017     C*  Corporation.                                                             *
0018     C*                                                                           *
0019     C*  DIGITAL assumes no responsibility for the use or  reliability  of  its   *
0020     C*  software on equipment which is not supplied by DIGITAL.                  *
0021     C*                                                                           *
0022     C*****************************************************************************
0023     C
0024     C REVISION HISTORY:
0025     C
0026     C       TIM HALVORSEN   31-MAR-1980     ALLOW ANY LETTER AS UNIT NAME AND
0027     C                                       ASSIGN UNIT SIZE OF 1 FOR UNKNOWNS
0028     C
0029
```

```
0030    C               23-03-77        CP      INITIALIZE THE STRING SUFNAM TO
0031    C                                       THE SAME STRING OF CHARACTERS AS
0032    C                                       THE STRING SUFDEF.
0033            SUBROUTINE GETSTC
0034
0035
0036    C       ONCE A LINE IS IDENTIFIED AS A STRUCTURE DECLARATION,
0037    C       THIS SUBROUTINE, GETSTC, IS CALLED TO COLLECT THE NAME
0038    C       OF THE STRUCTURE (HEREAFTER REFERRED TO AS THE PREFIX)
0039    C       AND THE SUFFIX (OPTIONAL).
0040
0041    C       THE INPUT ARGUMENT IS THE SUBSCRIPT OFFSET TO THE NEXT
0042    C       CHARACTER TO BE READ IN THE INPUT LINE.
0043
0044    C       IF AN ERROR IS DETECTED, THE LOGICAL VARIABLE STROK IS
0045    C       SET TO FALSE.
0046
0047            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0149
0150    C       FIRST INITIALIZE THE SUFFIX NAME TO THE DEFAULT VALUE.
0151    C       ALSO INITIALIZE THE PREFIX NAME TC A LENGTH OF ZERO.
0152
0153            DO 10 I = 1,4
0154            SUFNAM (I) = SUFDEF (I)
0155    10      CONTINUE
0156            PRENAM (1) = 0
0157
0158    C       NOW LOOK FOR THE STRUCTURE PREFIX NAME.
0159
0160            IF (DEBUG) TYPE 500
0161    500     FORMAT (' INTO GETSTC')
0162            CALL GETTOK
0163            IF (TOKTYP .NE. ALPHA) GOTO 100
0164            CALL MOVSTG (TOKSTG, PRENAM)
0165    C       IF (DEBUG) TYPE 510, (PRENAM (I), I = 2, PRENAM (1) + 1)
0166    510     FORMAT (' PREFIX IS ',15A1)
0167            CALL GETTOK
0168            IF (TOKTYP .NE. COMMA) GOTO 15
0169            CALL GETTOK
0170            IF (TOKTYP .NE. ALPHA) GOTO 100
0171            CALL MOVSTG (TOKSTG, SUFNAM)
0172    C       IF (DEBUG) TYPE 520, (SUFNAM (I), I = 2, SUFNAM (1) + 1)
0173    520     FORMAT (' SUFFIX IS ',15A1)
0174
0175    15      INPTR = LASTNB (INPTR - 2)
0176    20      CALL OUTSTR
0177            CALL INISTR
0178            STROK = .TRUE.
0179            RETURN
0180
0181    100     TYPE 1000
0182    1000    FORMAT (' INVALID STRUCTURE DECLARATION')
0183            STROK = .FALSE.
0184            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	212	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	48	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	36	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4195	

ENTRY POINTS

Address	Type	Name
0-00000000		GETSTC

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-0C000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0C000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

```
  9-00000662  I*2  BLINCR      162  (81)
  6-0000017E  I*2  BLSSIZ       20  (10)
  9-000003D8  I*2  BVALUE      162  (81)
  6-000000EA  I*2  BYTSIZ       20  (10)
  6-000001B4  I*2  COMGBL       12  (6)
  6-000000C4  I*2  COMMAS        4  (2)
  6-00000112  I*2  CONBAS       20  (10)
  6-00000126  I*2  CONINC       20  (10)
  9-0000012C  I*2  CONPRE       32  (16)
  9-0000014C  I*2  CONTAG       32  (16)
  9-000007A6  I*2  CONTEX      198  (9, 11)
  6-000001D6  I*2  CPAREN        4  (2)
  6-000001D0  I*2  CPRCOM        6  (3)
  9-00000170  I*2  CVALUE      162  (81)
  6-0000004C  I*2  DEFEND       20  (10)
  6-00000022  I*2  DEFINI       20  (10)
  6-000001DE  I*2  DOLBIT       26  (13)
  6-000001F8  I*2  DOLBYT       28  (14)
  6-00000036  I*2  DOLDEF       12  (6)
  6-00000214  I*2  DOLFLD       24  (12)
  6-00000016  I*2  DOLGBL       12  (6)
  6-00000234  I*2  DOLLAR        4  (2)
  6-00000090  I*2  DOLVLD       18  (9)
  6-000000DE  I*2  DOTBLK       12  (6)
  6-00000042  I*2  DOTEQS       10  (5)
  6-00000000  I*2  DOTMAC       22  (11)
  6-00000060  I*2  ENDMAC       18  (9)
  6-000000B2  I*2  EQULST       18  (9)
  6-00000102  I*2  EQUTAB       12  (6)
  6-0000007E  I*2  EXCLSP       14  (7)
  6-00000230  I*2  EXPCLO        4  (2)
  6-0000022C  I*2  EXPOPN        4  (2)
  9-000000B8  I*2  FLDNAM       72  (36)
  6-000001B0  I*2  HYPHEN        4  (2)
 10-00000000  I*2  INBUF       166  (83)
  6-000000C8  I*2  LANHYP        6  (3)
  3-00000000  L*1  LINE        133  (133)
  6-0000013A  I*2  LITTAB       18  (9)
  6-0000015A  I*2  MACTAB       16  (8)
 10-000000AA  I*2  MARBUF      240  (120)
  9-000005C0  I*2  MRBASE      162  (81)
  9-00000704  I*2  MRINCR      162  (81)
  9-00000336  I*2  MVALUE      162  (81)
  3-0000010A  L*1  NAME         32  (32)
  7-00000000  I*2  NEGSGN        4  (2)
  3-0000012A  L*1  NUMSTR      133  (133)
  6-000001DA  I*2  OASIGN        4  (2)
  6-0000016A  I*2  OFFSET       20  (10)
  6-000001A2  I*2  ONESHF        6  (3)
  6-0000010E  I*2  OPAREN        4  (2)
  9-000002CE  I*2  OSBNAM       32  (16)
  9-000002EE  I*2  OTGNAM       32  (16)
  9-0000030E  I*2  OUNTYP       32  (16)
  6-0000019A  I*2  PCTSEM        8  (4)
  3-00000085  L*1  PREFIX      133  (133)
  9-00000052  I*2  PRENAM       32  (16)
  6-000000D4  I*2  RANHYP        6  (3)
```

```
  9-00000021A  I*2  RSTLIN              180  (90)
  6-00000154   I*2  SEMSPC                6  (3)
  6-000000FE   I*2  SPCSTG                4  (2)
  6-000001A8   I*2  SPHYSP                8  (4)
  9-00000092   I*2  STRSTG               32  (16)
  6-00000072   I*2  SUFDEF                8  (4)
  9-00000072   I*2  SUFNAM               32  (16)
  6-0000014C   I*2  TABEQS                8  (4)
  6-000000CE   I*2  TABLAN                6  (3)
  6-000001CA   I*2  TABOPR                6  (3)
  6-000001C0   I*2  TABPRN               10  (5)
  6-000000AC   I*2  TABRAN                6  (3)
  6-0000008C   I*2  TABSTG                4  (2)
  9-00000100   I*2  TAGNAM               32  (16)
  9-0000047A   I*2  TMPVAL              162  (81)
  9-00000000   I*2  TOKSTG               80  (40)
  6-00000238   I*2  UNDVLD               18  (9)
  6-0000007A   I*2  UNITYP                4  (2)
  6-00000192   I*2  ZEROSG                4  (2)
  6-000000A2   I*2  ZRLAHY               10  (5)

LABELS

    Address   Label       Address   Label       Address   Label       Address   Label       Address   Label       Address   Label
      **      10        0-00000082  15            **      20        0-000000B6  100       1-00000000  500'         **      510'
      **      520'      1-0000000F  1000'

FUNCTIONS AND SUBROUTINES REFERENCED

  Type  Name              Type  Name              Type  Name              Type  Name              Type  Name
        GETTOK                  INISTR            I*2   LASTNB                  MOVSTG                  OUTSTR
```

```
0001     C        REVISION HISTORY:
0002     C                22-03-77        CP      CHANGE ORIGIN TO POINTD, PORIG
0003     C                                        TO PPOINT. ADD LEGAL DEFINITION
0004     C                                        OF 'O', ORIGIN, SETS LINE TYPE TO
0005     C                                        ORIGIN AND CALLS PPOINT.
0006     C                                        ADD LOGIC TO HANDLE NEGATIVE OFFSETS.
0007     C                                        BASICALLY, OF SEE A NEGATIVE FIELD,
0008     C                                        OUTPUT THAT LINE AND ALL SUBSEQUENT
0009     C                                        LINES UNTIL A POSITIVE FIELD IS SEEN TO
0010     C                                        A TMP FILE. WHEN A POSITIVE FIELD IS
0011     C                                        SEEN, PROCESS THE TMP FILE AS THOUGH
0012     C                                        IT WERE THE SOURCE FILE, PRECEDING ITS
0013     C                                        OUTPUT WITH A NEGATIVE BLKB DECLARATION.
0014     C                                        THEN RESUME PROCESSING OF THE SOURCE FILE.
0015     C
0016     C
0017     C                04-04-77        TC      CORRECT BUG IN RETURNING TO NORMAL
0018     C                                        PROCESSING (CORRECTION DUE TO CP)
0019     C                                        CHANGE START OF NEGATIVE OFFSET FIELDS
0020     C                                        FROM NEGCNT TO MNGCNT (MAXIMUM NEGATIVE
0021     C                                        COUNT).
0022     C
0023     C                17-02-80                TIM HALVORSEN
0024     C                                        ADD 'STRUCT' KEYWORD TO SIGNIFY THE
0025     C                                        BEGINNING OF A USER STRUCTURE DEFN.
0026     C                                        THE ONLY DIFFERENCE IS THAT AN ' ' IS
0027     C                                        USED RATHER THAN '$' AFTER THE PREFIX.
0028
0029              SUBROUTINE STPROC
0030
0031     C        INPUTS LINES UNTIL A $STRUCT DECLARATION IS FOUND.
0032     C        THEN PROCEEDS TO PROCESS A STRUCTURE THROUGH THE
0033     C        END STATEMENT OF THE DECLARATION.
0034
0035              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0137              INTEGER STRUSR(7),STRTYP
0138
0139              DATA STRSTG(1)/7/,STRSTG(2)/'$'/,STRSTG(3)/'S'/,
0140             1        STRSTG(4)/'T'/,STRSTG(5)/'R'/,STRSTG(6)/'U'/,
0141             2        STRSTG(7)/'C'/,STRSTG(8)/'T'/
0142              DATA STRUSR(1)/6/,STRUSR(2)/'S'/,STRUSR(3)/'T'/,
0143             1        STRUSR(4)/'R'/,STRUSR(5)/'U'/,STRUSR(6)/'C'/,
0144             2        STRUSR(7)/'T'/
0145
0146     C        INPUT LINES UNTIL A STRUCT OR $STRUCT IS FOUND. THE
0147     C        FIRST TOKEN IN THE LINE SHOULD BE TYPE ALPHA.
0148
0149              IF (DEBUG) TYPE 1010
0150     1010     FORMAT (' IN STPROC')
0151
0152     C        ASSUME SYSTEM TYPE STRUCTURE (USING '$')
0153
0154              STRTYP = '$'
0155
0156     10       CALL GETLIN
0157              IF (.NOT. ENDFIL) GOTO 12
0158              IF (.NOT. TMPIN) RETURN
```

```
0159            REWIND TMP
0160            TMPIN = .FALSE.
0161            ENDFIL = .FALSE.
0162            GOTO 10
0163
0164    12      CALL GETTOK
0165            IF (DEBUG) TYPE 1000, TOKTYP
0166    1000    FORMAT (' TOKTYP IS ',I2)
0167            IF (TOKTYP .NE. ALPHA) GOTO 15
0168            IF (DEBUG) TYPE 1020, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0169    1020    FORMAT (' TOKSTG IS ',15A1)
0170            CALL CMPSTG (TOKSTG, STRSTG)
0171            IF (STGEQL) GOTO 20
0172            CALL CMPSTG (TOKSTG, STRUSR)
0173            IF (STGEQL) GOTO 21
0174
0175    C       THIS LINE DOES NOT DECLARE A STRUCTURE. JUST OUTPUT IT
0176    C       TO BOTH BLISS AND MARS AS IS.
0177
0178    15      CALL OUT2LN
0179            GOTO 10
0180
0181    C       USER STRUCTURE DECLARATION RECOGNIZED.  REMEMBER TO CHANGE
0182    C       THE TAGNAM SO THAT UNDERSCORE IS USED RATHER THAN $.
0183
0184    21      STRTYP = '_'
0185
0186    C       STRUCTURE DECLARATION RECOGNIZED. COLLECT THE PREFIX AND
0187    C       SUFFIX NAMES AND OUTPUT THE STRUCTURE DEFINITION LINES
0188    C       (TAGNAM(2) IS SET TO INDICATE THE PROPER FORM OF MACRO NAME).
0189
0190    20      LINTYP = 0
0191            BLKOUT = .FALSE.
0192            TAGNAM (2) = STRTYP
0193            CALL GETSTC
0194            IF (STROK) GOTO 25
0195            RETURN
0196
0197    C       NOW INPUT A LINE AND SEE WHAT TYPE OF DEFINITION IT IS.
0198    C       THE STRUCTURE VARIABLES HAVE BEEN INITIALIZED BY GETSTC.
0199    C       (RESET TAGNAM(2) BECAUSE STRUCT INIT. SETS IT TO '$').
0200
0201    25      TAGNAM (2) = STRTYP
0202            POSOFF = .TRUE.
0203            CALL GETLIN
0204            IF (.NOT. ENDFIL) GOTO 30
0205            IF (.NOT. TMPIN) RETURN
0206            REWIND TMP
0207            TMPIN = .FALSE.
0208            ENDFIL = .FALSE.
0209            GOTO 25
0210
0211    30      CALL GETTOK
0212            IF (TOKTYP .EQ. MINUS) GOTO 35
0213            IF (TOKTYP .NE. PLUS) GOTO 45
0214            GOTO 40
0215
```

```
0216     35       POSOFF = .FALSE.
0217              INBUF (INPTR - 1) = '+'
0218              IF (.NOT. TMPIN) GOTO 40
0219              TYPE 2000
0220     2000     FORMAT (' NEGATIVE DEFINITION IN TMP FILE')
0221              RETURN
0222
0223     40       CALL GETTOK
0224     45       IF ((TOKTYP .EQ. ALPHA) .AND.
0225     1            (TOKSTG (1) .EQ. 1)) GOTO 55
0226
0227     50       CALL OUT2LN
0228              GOTO 25
0229
0230     55       IF (TOKSTG (2) .NE. 'F') GOTO 65
0231              IF (.NOT. POSOFF) GOTO 60
0232              IF (FLDLAS) CALL CHKALC
0233
0234     60       LINTYP = FIELD
0235              CALL PFIELD
0236              GOTO 25
0237
0238     65       IF (POSOFF) GOTO 70
0239              TYPE 2010
0240     2010     FORMAT (' INVALID NEGATIVE DEFINITION')
0241              GOTO 50
0242
0243     70       IF (TOKSTG (2) .EQ. 'E') GOTO 155
0244              IF (TOKSTG (2) .EQ. 'M') GOTO 160
0245              IF (TOKSTG (2) .EQ. 'P') GOTO 165
0246              IF (TOKSTG (2) .EQ. 'O') GOTO 170
0247              IF (TOKSTG (2) .EQ. 'V') GOTO 140
0248              IF ((TOKSTG (2) .EQ. 'C') .OR.
0249              1       (TOKSTG (2) .EQ. 'K')) GOTO 145
0250              IF (TMPOUT) GOTO 50
0251              IF (TOKSTG (2) .EQ. 'S') GOTO 135
0252              IF (TOKSTG (2) .EQ. 'L') GOTO 150
0253              GOTO 50
0254
0255     C        PROCESS A SUBFIELD DECLARATION
0256
0257     135      LINTYP = SBFLD
0258              CALL PSBFLD
0259              GOTO 25
0260
0261     C        PROCESS A BITFIELD DECLARATION
0262
0263     140      LINTYP = VIELD
0264              CALL PVIELD
0265              GOTO 25
0266
0267     C        PROCESS A CONSTANT DECLARATION
0268
0269     145              LINTYP = CONST
0270              CALL PCONST
0271              GOTO 25
0272
```

```
0273     C        PROCESS A LABEL DECLARATION
0274
0275     150      IF (FLDLAS) CALL CHKALC
0276              LINTYP = LABELN
0277              CALL PLABEL
0278              GOTO 25
0279
0280     C        PROCESS AN END DECLARATION
0281
0282     155      IF (TMPOUT) GOTO 157
0283              IF (FLDLAS) CALL CHKALC
0284              CALL OUTSTE
0285              RETURN
0286
0287     157      CALL OUT2LN
0288              CALL STANEG
0289              GOTO 25
0290
0291     C        THIS IS A POSITION MARKING
0292
0293     160      LINTYP = MARKPT
0294              CALL PMARK
0295              GOTO 25
0296
0297     C        THIS IS A POINT COMMAND
0298
0299     165      IF (FLDLAS) CALL CHKALC
0300              LINTYP = POINTD
0301              CALL PPOINT
0302              GOTO 25
0303
0304     C        THIS IS A REORIGINING COMMAND
0305
0306     170      IF (FLDLAS) CALL CHKALC
0307              LINTYP = ORIGIN
0308              CALL PPOINT
0309              GOTO 25
0310
0311              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	862	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	113	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	44	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4918	

ENTRY POINTS

Address	Type	Name
0-00000000		STPROC

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000010	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	2-0000000E	I*2	STRTYP
11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT
9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ
5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ			

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
2-00000000	I*2	STRUSR	14	(7)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000002E	10	0-0000005B	12	0-000000FA	15	0-0000010A	20	0-00000104	21	0-0000012E	25
0-00000167	30	0-00000182	35	0-000001B3	40	0-000001BA	45	0-000001CC	50	0-000001D6	55
0-000001FC	60	0-0000020B	65	0-0000022C	70	0-0000028E	135	0-0000029D	140	0-000002AC	145
0-000002BD	150	0-000002DD	155	0-000002FC	157	0-0000030D	160	0-0000031E	165	0-0000033E	170
1-0000000D	1000'	1-00000000	1010'	1-0000001D	1020'	1-0000002F	2000'	1-00000052	2010'		

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	CHKALC		CMPSTG		GETLIN		GETSTC		GETTOK		OUT2LN
	OUTSTE		PCONST		PFIELD		PLABEL		PMARK		PPOINT
	PSBFLD		PVIELD		STANEG						

```
0001     C        REVISION HISTORY
0002     C                11-04-77        TC      ELIMINATED EXTRANEOUS STATEMENT
0003     C                                        NUMBER.
0004     C
0005
0006              SUBROUTINE STANEG
0007
0008     C        THIS IS A NEW ROUTINE, VERSION 1.3
0009     C
0010     C        THIS CLOSES THE TMP FILE FOR OUTPUT. REWINDS IT.
0011     C        SETS FLAGS SO THAT INPUT NOW COMES FROM THE TMP
0012     C        FILE. SETS ALL CONTEXT VARIABLES CORRECTLY.
0013     C        OUTPUTS NEGATIVE BLOCK ALLOCATION IF NECESSARY.
0014
0015              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0117
0118              END FILE TMP
0119              REWIND TMP
0120              TMPIN = .TRUE.
0121              BLFOFS = BLFOFS - MNGCNT
0122              BOFSET = BLFOFS
0123              FOFSET = BLFOFS
0124              OUNSIZ = 1
0125              OUNTYP (2) = 'B'
0126              IF (MNGCNT .GT. 0) CALL OUTBLK (MNGCNT)
0127              FLDLAS = .FALSE.
0128              TMPOUT = .FALSE.
0129              RETURN
0130              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	107	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	8	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4014	

ENTRY POINTS

Address	Type	Name
0-00000000		STANEG

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)

PV

6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)

6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
	OUTBLK

PV

02
02
02

```
0001              SUBROUTINE PLABEL
0002
0003      C       THIS ROUTINE IS CALLED WHEN A LINE HAS BEEN RECOGNIZED
0004      C       AS A LABEL DEFINITION. THE IMPLIC ARGUMENT INPTR IS THE OFFSET
0005      C       TO THE NEXT CHARACTER TO BE READ IN THE INPUT LINE.
0006
0007      C       PLABEL COLLECTS THE NAME OF THE LABEL BEING DEFINED AND
0008      C       THEN OUTPUTS APPROPRIATE STATEMENTS TO THE BLISS AND MARS
0009      C       TRANSLATED FILES.
0010
0011              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0113
0114              CALL GETTOK
0115              IF (TOKTYP .NE. ALPHA) GOTO 100
0116              CALL MOVSTG (TOKSTG, FLDNAM)
0117              TAGNAM (3) = 'C'
0118              INPTR = INPTR - 1
0119              CALL MDOUTL (INPTR)
0120              CALL BDOUTL (INPTR)
0121              RETURN
0122
0123      C       ERROR REPORTING
0124
0125      100     TYPE 1000
0126      1000    FORMAT (' INVALID LABEL DEFINITION')
0127              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	88	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	28	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	20	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4035	

PV

1

1

ENTRY POINTS

Address	Type	Name
0-00000000		PLABEL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEOL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)

6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label
0-00000040	100	1-00000000	1000'

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name
	BDOUTL		GETTOK		MDOUTL		MOVSTG

00
00
00

```
0001
```

```
0002              SUBROUTINE GETUND
0003
0004    C         ANALYZES AN ALPHA STRING THAT CLAIMS TO BE A UNIT
0005    C         DESCRIPTOR. IF IT IS VALID, STORES THE LETTER
0006    C         IN UNITYP AND THE APPROPRIATE SIZE VALUE IN UNISIZ.
0007    C         ALSO COMPOSES A TAG NAME STRING FROM A DOLLAR SIGN FOLLOWED
0008    C         BY THE UNIT DESCRIPTOR LETTER, FOLLOWED BY AN UNDERSCORE.
0009
0010    C         THE IMPLICIT ARGUMENT IS THE COUNTED STRING, TOKSTG, THAT IS
0011    C         THE UNIT DESCRIPTOR LETTER. A LOGICAL VARIABLE IS
0012    C         SET TO TRUE OR FALSE ACCORDING TO THE VALIDITY OF THE
0013    C         ARGUMENT.
0014
0015              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0117
0118    C         IF (DEBUG) TYPE 500
0119    500       FORMAT (' IN UNIT DESCRIPTOR ANALYZER')
0120              IF (TOKSTG (1) .NE. 1) GOTO 100
0121              UNITYP (2) = TOKSTG (2)
0122              TAGNAM (3) = TOKSTG (2)
0123
0124              IF (TOKSTG (2) .EQ. 'W') GOTO 15
0125              IF ((TOKSTG (2) .EQ. 'L')  .OR. (TOKSTG (2) .EQ. 'A')) GOTO 20
0126              IF (TOKSTG (2) .EQ. 'Q') GOTO 25
0127
0128              UNISIZ = 1
0129              UNITYP (2) = 'B'
0130              BLBITS = 8
0131              GOTO 30
0132
0133    15        UNISIZ = 2
0134              BLBITS = 16
0135              GOTO 30
0136
0137    20        UNISIZ = 4
0138              UNITYP (2) = 'L'
0139              BLBITS = 32
0140              GOTO 30
0141
0142    25        UNISIZ = 8
0143              BLBITS = 64
0144
0145    30        UNDOK = .TRUE.
0146              RETURN
0147
0148    100       UNDOK = .FALSE.
0149              RETURN
0150              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	148	PIC CON REL LCL SHR EXE RD NOWRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4047	

ENTRY POINTS

Address	Type	Name
0-00000000		GETUND

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)

9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)

6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-00000051	15	0-0000005D	20	0-00000076	25	0-00000085	30	0-0000008D	100	**	500'

MD
03
03
03
03
03
03
03
03
03
03
03
03
04
04
04

```
0001    C       REVISION HISTORY:
0002    C               23-03-77        CP      IF SAVING INPUT IN TMP FILE, SAVE
0003    C                                       EACH LINE OF A BITFIELD DECLARATION,
0004    C                                       AND RETURN AFTER THE CLOSING RIGHT
0005    C                                       ANGLE BRACKET.
0006    C
0007    C               22-04-77        TC      CALL BDOUTL AT START AND
0008    C                                       END TO OUTPUT COMMENTS INTO
0009    C                                       THE BLISS FILE.
0010
0011            SUBROUTINE PVIELD
0012
0013    C       THIS ROUTINE IS CALLED WHEN ALINE HAS BEEN RECOGNIZED
0014    C       AS A BITFIELD DEFINITION. THE IMPLICIT ARGUMENT
0015    C       INPTR IS THE OFFSET TO THE NEXT CHARACTER IN THE INPUT LINE.
0016
0017    C       PVIELD COLLECTS THE MASK FLAG FOR THE SET OF BITFIELDS TO
0018    C       BE DEFINED. THEN IT COLLECTS A BITFIELD DEFINITION AT A TIME.
0019    C       EACH BITFIELD DEFINITION CAN HAVE A NAME, SIZE, SIGN, AND
0020    C       INDIVIDUAL MASK. EACH BITFIELD IS PROCESSED AND OUTPUT.
0021
0022    C       WHEN A SINGLE LEADING RIGHT ANGLE BRACKET IS RECOGNIZED,
0023    C       PROCESSING OF THE VIELD IS COMPLETE.
0024
0025            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0127
0128    C       INITIALIZE MASK AND SIGN ARGUMENTS
0129
0130            VMASK = .FALSE.
0131            AMASK (1) = 0
0132            ASIGN (1) = 1
0133
0134            CALL GETTOK
0135            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0136    500     FORMAT (' ',90A1)
0137            IF (TOKTYP .NE. LANGLE) GOTO 100
0138            IF (TMPOUT) GOTO 50
0139            CALL GETTOK
0140            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0141            IF (TOKTYP .NE. ALPHA) GOTO 10
0142            IF (TOKSTG (1) .NE. 1) GOTO 110
0143            IF (TOKSTG (2) .NE. 'M') GOTO 110
0144            VMASK = .TRUE.
0145            AMASK (1) = 1
0146            INPTR = INPTR - 1
0147            GOTO 12
0148
0149    C       THE POINTER INTO THE INPUT LINE IS TOO FAR ALONG, BACK IT
0150    C       UP ONE POSITION.
0151
0152    10      INPTR = LASTNB (INPTR - 2)
0153
0154    C       NOW OUTPUT THE LINE THAT INITIATES A BITFIELD DEFINITION LIST.
0155
0156    12      VOFSET = 0
0157            TAGNAM (3) = 'V'
0158            CALL MDOUTL (INPTR)
```

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0159            CALL BDOUTL (INPTR)
0160
0161    C       INITIALIZE VARIABLES, AND INPUT A LINE.
0162
0163    15      VSIZ = 0
0164            FSIGN = 0
0165            SMASK = .FALSE.
0166            IF (.NOT. VMASK) AMASK (1) = 0
0167            ASIGN (2) = '0'
0168            DO 20 I = 1, 15
0169            FLDNAM (I) = 0
0170    20      CONTINUE
0171
0172    21      CALL GETLIN
0173            IF (.NOT. ENDFIL) GOTO 22
0174            RETURN
0175
0176    C       CHECK THE FIRST TOKEN. IF IT IS A RIGHT ANGLE,
0177    C       THIS IS THE LAST STATEMENT IN THE BITFIELD DEFINITIONS.
0178
0179    22      CALL GETTOK
0180            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0181            IF (DEBUG) TYPE 510, TOKTYP
0182    510     FORMAT (' TOKTYP IS ',I3)
0183            IF (TOKTYP .EQ. RANGLE) GOTO 90
0184            IF (TMPOUT) GOTO 50
0185            LINTYP = BITFNM
0186
0187    C       SEE IF THIS HAS A BITFIELD NAME OR IS END OF LINE
0188
0189            IF (TOKTYP .EQ. ALPHA) GOTO 24
0190            IF ((TOKTYP .NE. SEMI) .AND.
0191            1       (TOKTYP .NE. EOL)) GOTO 25
0192
0193    C       THIS LINE IS BLANK OR ONLY COMMENTS
0194
0195            CALL OUTBCL
0196            GOTO 21
0197
0198    C       THIS IS A BITFIELD NAME DEFINITION
0199
0200    24      CALL MOVSTG (TOKSTG, FLDNAM)
0201            CALL GETTOK
0202            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0203
0204    C       NOW LOOK FOR THE SIZE FIELD.
0205
0206    25      IF (DEBUG) TYPE 510, TOKTYP
0207            IF (TOKTYP .NE. COMMA) GOTO 40
0208            CALL GETTOK
0209            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0210            IF (TOKTYP .NE. NUMBER) GOTO 30
0211            VSIZ = INTVAL (TOKSTG)
0212            IF (VSIZ .EQ. - 1) GOTO 120
0213            CALL GETTOK
0214            IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0215
```

```
0216     C        NOW CHECK FOR A SIGN FIELD.
0217
0218     30       IF (DEBUG) TYPE 510, TOKTYP
0219              IF (TOKTYP .NE. COMMA) GOTO 40
0220              CALL GETTOK
0221              IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0222              IF (TOKTYP .NE. ALPHA) GOTO 35
0223              IF (TOKSTG (1) .NE. 1) GOTO 130
0224              IF (TOKSTG (2) .NE. 'S') GOTO 130
0225              FSIGN = 1
0226              ASIGN (2) = '1'
0227              CALL GETTOK
0228              IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0229
0230     C        FINALLY, LOOK FOR A MASK ARGUMENT.
0231
0232     35       IF (DEBUG) TYPE 510, TOKTYP
0233              IF (TOKTYP .NE. COMMA) GOTO 40
0234              CALL GETTOK
0235              IF (DEBUG) TYPE 500, (TOKSTG (I), I = 2, TOKSTG (1) + 1)
0236              IF (TOKTYP .NE. ALPHA) GOTO 40
0237              IF (TOKSTG (1) .NE. 1) GOTO 110
0238              IF (TOKSTG (2) .NE. 'M') GOTO 110
0239              SMASK = .TRUE.
0240              AMASK (1) = 1
0241              INPTR = INPTR - 1
0242              GOTO 45
0243
0244     C        THE OFFSET INTO THE INPUT LINE IS ONE CHARACTER OFF
0245     C        BECAUSE SOME TRAILING OPTIONAL ARGUMENTS WERE OMITTED. BACK UP
0246     C        THE OFFSET COUNT BY ONE.
0247
0248     40       INPTR = LASTNB (INPTR - 2)
0249
0250     C        ARGUMENTS ARE ALL COLLECTED. OUTPUT THE LINE.
0251
0252     45       CALL MDOUTL (INPTR)
0253              CALL BDOUTL (INPTR)
0254              IF (VSIZ .EQ. 0) VOFSET = VOFSET + 1
0255              IF (VSIZ .GT. 0) VOFSET = VOFSET + VSIZ
0256              GOTO 15
0257
0258     C        IF OUTPUTTING TO TMP FILE, JUST DO IT, THEN GO FOR NEXT LINE.
0259
0260     50       CALL OUT2LN
0261              GOTO 21
0262
0263     C        OUTPUT THE FINAL CLOSING OF THE BITFIELD DEFINITIONS.
0264
0265     90       IF (TMPOUT) GOTO 95
0266              LINTYP = VIELDE
0267              CALL MDOUTL (INPTR)
0268              CALL BDOUTL (INPTR)
0269              RETURN
0270
0271     C        OUTPUT THE FINAL CLOSING LINE TO TMP FILE AND RETURN.
0272
```

```
0273     95        CALL OUT2LN
0274               RETURN
0275
0276     C         ERROR REPORTING
0277
0278     100       TYPE 1000
0279     1000      FORMAT (' INVALID BITFIELD DEFINITION')
0280               RETURN
0281
0282     110       TYPE 1100
0283     1100      FORMAT (' INVALID MASK SPECIFICATION')
0284               RETURN
0285
0286     120       TYPE 1200
0287     1200      FORMAT (' INVALID SIZE ARGUMENT IN BITFIELD DEFINITION')
0288               RETURN
0289
0290     130       TYPE 1300
0291     1300      FORMAT (' INVALID SIGN ARGUMENT IN BITFIELD DEFINITION')
0292               END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	.CODE	1390	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	181	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	56	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	5526	

ENTRY POINTS

Address	Type	Name
0-00000000		PVIELD

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNIOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VS Z						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)

```
  6-00000102  I*2  EQUTAB      12  (6)
  6-0000007E  I*2  EXCLSP      14  (7)
  6-00000230  I*2  EXPCLO       4  (2)
  6-0000022C  I*2  EXPOPN       4  (2)
  9-000000B8  I*2  FLDNAM      72  (36)
  6-000001B0  I*2  HYPHEN       4  (2)
 10-00000000  I*2  INBUF      166  (83)
  6-000000C8  I*2  LANHYP       6  (3)
  3-00000000  L*1  LINE       133  (133)
  6-0000013A  I*2  LITTAB      18  (9)
  6-0000015A  I*2  MACTAB      16  (8)
 10-000000AA  I*2  MARBUF     240  (120)
  9-000005C0  I*2  MRBASE     162  (81)
  9-00000704  I*2  MRINCR     162  (81)
  9-00000336  I*2  MVALUE     162  (81)
  3-0000010A  L*1  NAME        32  (32)
  7-00000000  I*2  NEGSGN       4  (2)
  3-0000012A  L*1  NUMSTR     133  (133)
  6-000001DA  I*2  OASIGN       4  (2)
  6-0000016A  I*2  OFFSET      20  (10)
  6-000001A2  I*2  ONESHF       6  (3)
  6-0000010E  I*2  OPAREN       4  (2)
  9-000002CE  I*2  OSBNAM      32  (16)
  9-000002EE  I*2  OTGNAM      32  (16)
  9-0000030E  I*2  OUNTYP      32  (16)
  6-0000019A  I*2  PCTSEM       8  (4)
  3-00000085  L*1  PREFIX     133  (133)
  9-00000052  I*2  PRENAM      32  (16)
  6-000000D4  I*2  RANHYP       6  (3)
  9-0000021A  I*2  RSTLIN     180  (90)
  6-00000154  I*2  SEMSPC       6  (3)
  6-000000FE  I*2  SPCSTG       4  (2)
  6-000001A8  I*2  SPHYSP       8  (4)
  9-00000092  I*2  STRSTG      32  (16)
  6-00000072  I*2  SUFDEF       8  (4)
  9-00000072  I*2  SUFNAM      32  (16)
  6-0000014C  I*2  TABEQS       8  (4)
  6-000000CE  I*2  TABLAN       6  (3)
  6-000001CA  I*2  TABOPR       6  (3)
  6-000001C0  I*2  TABPRN      10  (5)
  6-000000AC  I*2  TABRAN       6  (3)
  6-0000008C  I*2  TABSTG       4  (2)
  9-00000100  I*2  TAGNAM      32  (16)
  9-0000047A  I*2  TMPVAL     162  (81)
  9-00000000  I*2  TOKSTG      80  (40)
  6-00000238  I*2  UNDVLD      18  (9)
  6-0000007A  I*2  UNITYP       4  (2)
  6-00000192  I*2  ZEROSG       4  (2)
  6-000000A2  I*2  ZRLAHY      10  (5)
```

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-000000EF	10	0-0000010C	12	0-00000127	15	**	20	0-00000167	21	0-00000177	22
0-0000021B	24	0-00000262	25	0-0000032E	30	0-000003F9	35	0-0000048E	40	0-000004AB	45
0-000004DC	50	0-000004E6	90	0-00000506	95	0-0000050E	100	0-00000526	110	0-0000053E	120
0-00000556	130	1-00000000	500'	1-00000008	510'	1-00000018	1000'	1-00000037	1100'	1-00000055	1200'
1-00000085	1300'										

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	BDOUTL		GETLIN		GETTOK	I*2	INTVAL	I*2	LASTNB		MDOUTL
	MOVSTG		OUT2LN		OUTBCL						

```
0001     C       Version V02-001
0002     C
0003     C*****************************************************************************
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0021     C*                                                                           *
0022     C*****************************************************************************
0023     C
0024     C       REVISION HISTORY:
0025     C               08-03-82                JIM TEAGUE # JWT0027
0026     C                                       ADD SIZE SYMBOLS FOR FIELDS GREATER
0027     C                                       THAN 4 BYTES LONG.
0028     C
0029     C               **** BEWARE ***         THESE CAN POSSIBLY CAUSE CONFLICTS
0030     C                                       WITH BIT FIELD SIZES.
0031     C
0032     C
0033     C               19-02-80                TIM HALVORSEN
0034     C                                       IF USER STRUCTURE, USE _VIELD RATHER
0035     C                                       THAN $VIELD.
0036              SUBROUTINE MDOUTL (PTR)
0037
0038     C         OUTPUTS A LINE TO THE TRANSLATED MARS FILE.
0039     C         THE ARGUMENT PTR POINTS TO THE LOGICAL END
0040     C         OF LINE IN THE INPUT FILE.
0041
0042              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0144
0145              INTEGER PTR
0146
0147              IF (DEBUG) TYPE 290
0148     290      FORMAT (' IN MARS OUTPUT')
0149              IF (LINTYP .EQ. FIELD) GOTO 10
0150              IF (LINTYP .EQ. SBFLD) GOTO 20
0151              IF (LINTYP .EQ. VIELD) GOTO 30
0152              IF (LINTYP .EQ. VIELDE) GOTO 35
0153              IF (LINTYP .EQ. CONST) GOTO 40
0154              IF (LINTYP .EQ. CONSTE) GOTO 45
0155              IF (LINTYP .EQ. BITFNM) GOTO 50
0156              IF (LINTYP .EQ. CONSTN) GOTO 60
0157              IF (LINTYP .EQ. SCONST) GOTO 70
0158              IF (LINTYP .EQ. MARKPT) GOTO 80
```

```
0159            IF (LINTYP .EQ. ORIGIN) GOTO 90
0160            IF (LINTYP .NE. LABELN) GOTO 100
0161
0162    C       THIS IS A LABEL DEFINITION TO BE OUTPUT. THE FORMAT IS
0163    C       '$DEF (TAB) PRENAM\TAGNAM\FLDNAM
0164    C        $DEF (TAB) PRENAM\KTAGNAM\FLDNAM' FOLLOWED BY THE REST OF THE
0165    C       INPUT LINE, WHERE KTAGNAM IS THE TAGNAM WITH THE SECOND
0166    C       CHARACTER CHANGED TO A 'K'.
0167
0168            IF (DEBUG) TYPE 490
0169    490     FORMAT (' LABEL OUTPUT')
0170            CALL PUTMAR (DOLDEF)
0171            CALL PUTMAR (PRENAM)
0172            CALL PUTMAR (TAGNAM)
0173            CALL PUTMAR (FLDNAM)
0174            CALL OUTMAR
0175            TAGNAM(3) = 'K'
0176            CALL PUTMAR (DOLDEF)
0177            CALL PUTMAR (PRENAM)
0178            CALL PUTMAR (TAGNAM)
0179            CALL PUTMAR (FLDNAM)
0180            CALL PUTMAR (TABSTG)
0181            CALL PUTMAR (TABSTG)
0182            INBUF (PTR) = INBUF (1) - PTR + 1
0183            CALL PUTMAR (INBUF (PTR))
0184            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0185    300     FORMAT (' ',90A1)
0186            CALL OUTMAR
0187            RETURN
0188
0189    C       THIS IS A FIELD DEFINITION TO BE OUTPUT. THE FORMAT IS
0190    C       '$DEF (TAB) PRENAM\TAGNAM\FLDNAM (TAB) .BLK\UNITYP'
0191    C       FOLLOWED BY THE REST OF THE LINE.
0192
0193    10      IF (DEBUG) TYPE 500
0194    500     FORMAT (' FIELD OUTPUT')
0195            CALL NUMSTG (BYTSIZ, OFSIZ)
0196            IF (OSBNAM (1) .EQ. 0) GOTO 11
0197            CALL PUTMAR (DOLDEF)
0198            CALL PUTMAR (PRENAM)
0199            CALL PUTMAR (OTGNAM)
0200            CALL PUTMAR (OSBNAM)
0201            GOTO 12
0202
0203    C       THIS IS JUST ALLOCATION OF SPACE, WITH NO ACCOMPANYING
0204    C       FIELD NAME.
0205
0206    11      CALL PUTMAR (TABSTG)
0207            CALL PUTMAR (TABSTG)
0208    12      IF (.NOT. BLKOUT) GOTO 13
0209            CALL PUTMAR (DOTBLK)
0210            CALL PUTMAR (OUNTYP)
0211            CALL PUTMAR (TABSTG)
0212            CALL PUTMAR (BYTSIZ)
0213            GOTO 15
0214
0215    C       THIS IS FOR NO BLOCK ALLOCATION
```

```
0216
0217    13      CALL PUTMAR (TABSTG)
0218            CALL PUTMAR (TABSTG)
0219
0220    15      CALL PUTMAR (SPCSTG)
0221            CALL PUTMAR (RSTLIN)
0222            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0223            CALL OUTMAR
0224    C===
0225    C
0226    C  JIM TEAGUE    3/8/82    ADD SIZE CONSTANTS TO MACRO OUTPUT
0227    C
0228    C  begin first code insertion
0229    C
0230    C===
0231            NBYTES = OFSIZ * OUNSIZ
0232            IF(NBYTES .LT. 5)GOTO 16
0233            IF(OSBNAM(1) .EQ. 0) GOTO 16
0234            CALL NUMSTG (BYTSIZ, NBYTES)
0235            CALL PUTMAR (EQUTAB)
0236            CALL PUTMAR (PRENAM)
0237            ISAVE = OTGNAM(3)
0238            OTGNAM(3) = 'S'
0239            CALL PUTMAR (OTGNAM)
0240            CALL PUTMAR (OSBNAM)
0241            CALL PUTMAR (TABSTG)
0242            CALL PUTMAR (BYTSIZ)
0243            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0244            CALL OUTMAR
0245            OTGNAM(3) = ISAVE
0246    16      CONTINUE
0247    C===
0248    C
0249    C  JIM TEAGUE    3/8/82    ADD SIZE CONSTANTS TO MACRO OUTPUT
0250    C
0251    C  end first code insertion
0252    C
0253    C===
0254            RETURN
0255
0256    C       THIS IS A SUBFIELD DEFINITION TO BE OUTPUT. THE FORMAT IS
0257    C       '$DEF (TAB) PRENAM\TAGNAM\FLDNAM (TAB) .BLK\UNITYP'
0258    C       FOLLOWED BY THE REST OF THE LINE.
0259
0260    20      IF (DEBUG) TYPE 510
0261    510     FORMAT (' SUBFIELD OUTPUT')
0262            IF (OSBNAM (1) .EQ. 0) RETURN
0263            CALL PUTMAR (DOLDEF)
0264            CALL PUTMAR (PRENAM)
0265            CALL PUTMAR (OTGNAM)
0266            CALL PUTMAR (OSBNAM)
0267            IF (.NOT. BLKOUT) GOTO 23
0268            CALL PUTMAR (DOTBLK)
0269            CALL PUTMAR (OUNTYP)
0270            CALL PUTMAR (TABSTG)
0271            CALL PUTMAR (BYTSIZ)
0272            GOTO 25
```

```
0273    23      CALL PUTMAR (TABSTG)
0274            CALL PUTMAR (TABSTG)
0275    25      CALL PUTMAR (SPCSTG)
0276            CALL PUTMAR (RSTLIN)
0277            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0278            CALL OUTMAR
0279    C===
0280    C
0281    C  JIM TEAGUE    3/8/82    ADD SIZE CONSTANTS TO MACRO OUTPUT
0282    C
0283    C   Begin second code insertion
0284    C
0285    C===
0286            NBYTES = OFSIZ * OUNSIZ
0287            IF(NBYTES .LT. 5)GOTO 26
0288            IF(OSBNAM(1) .EQ. 0) GOTO 26
0289            CALL NUMSTG (BYTSIZ, NBYTES)
0290            CALL PUTMAR (EQUTAB)
0291            CALL PUTMAR (PRENAM)
0292            ISAVE = OTGNAM(3)
0293            OTGNAM(3) = 'S'
0294            CALL PUTMAR (OTGNAM)
0295            CALL PUTMAR (OSBNAM)
0296            CALL PUTMAR (TABSTG)
0297            CALL PUTMAR (BYTSIZ)
0298            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0299            CALL OUTMAR
0300            OTGNAM(3) = ISAVE
0301    26      CONTINUE
0302    C===
0303    C
0304    C  JIM TEAGUE    3/8/82    ADD SIZE CONSTANTS TO MACRO OUTPUT
0305    C
0306    C  end second (and last) code insertion
0307    C
0308    C===
0309            RETURN
0310
0311    C       THIS IS THE BEGINNING OF A BITFIELD DEFINITION LIST. THE FORMAT IS
0312    C       '(TAB) $VIELD (TAB) PRENAM,0,<-' FOLLOWED BY THE
0313    C       REST OF THE LINE.
0314
0315    30      IF (DEBUG) TYPE 520
0316    520     FORMAT (' BITFIELD OUTPUT')
0317            IF (TAGNAM(2).EQ.'$') CALL PUTMAR (DOLVLD)
0318            IF (TAGNAM(2).EQ.' ') CALL PUTMAR (UNDVLD)
0319            CALL PUTMAR (PRENAM)
0320            CALL PUTMAR (COMMAS)
0321            CALL PUTMAR (ZRLAHY)
0322            CALL PUTMAR (SPCSTG)
0323            INBUF (PTR) = INBUF (1) - PTR + 1
0324            CALL PUTMAR (INBUF (PTR))
0325            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0326            CALL OUTMAR
0327            RETURN
0328
0329    C       THIS IS THE END OF A BITFIELD DEFINITION LIST TO BE
```

```
0330     C        OUTPUT. THE FORMAT IS '(TAB) (TAB) >' FOLLOWED BY THE
0331     C        REST OF THE LINE.
0332
0333     35       IF (DEBUG) TYPE 530
0334     530      FORMAT (' END VIELD OUTPUT')
0335              CALL PUTMAR (TABSTG)
0336              CALL PUTMAR (TABRAN)
0337              CALL PUTMAR (TABSTG)
0338              INBUF (PTR) = INBUF (1) - PTR + 1
0339              CALL PUTMAR (INBUF (PTR))
0340              IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0341              CALL OUTMAR
0342              RETURN
0343
0344     C        THIS IS THE BEGINNING OF A CONSTANT DEFINITION LIST.
0345     C        THE FORMAT IS '$EQULST (TAB) PRENAM\TAG,$GBL,BASE,INCREMENT,<-'
0346     C        FOLLOWED BY THE REST OF THE LINE.
0347
0348     40       IF (DEBUG) TYPE 540
0349     540      FORMAT (' CONSTANT LIST OUTPUT')
0350              CALL PUTMAR (EQULST)
0351              CALL PUTMAR (CONPRE)
0352              CALL PUTMAR (CONTAG)
0353              CALL PUTMAR (DOLGBL)
0354              CALL PUTMAR (COMMAS)
0355              CALL PUTMAR (MRBASE)
0356              CALL PUTMAR (COMMAS)
0357              CALL PUTMAR (MRINCR)
0358              CALL PUTMAR (COMMAS)
0359              CALL PUTMAR (LANHYP)
0360              CALL PUTMAR (SPCSTG)
0361              INBUF (PTR) = INBUF (1) - PTR + 1
0362              CALL PUTMAR (INBUF (PTR))
0363              IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0364              CALL OUTMAR
0365              RETURN
0366
0367     C        THIS IS THE END OF A CONSTANT DEFINITION LIST TO BE
0368     C        OUTPUT. THE FORMAT IS '(TAB) (TAB) >' FOLLOWED BY THE REST OF
0369     C        THE LINE.
0370
0371     45       IF (DEBUG) TYPE 550
0372     550      FORMAT (' END CONSTANT LIST OUTPUT')
0373              CALL PUTMAR (TABSTG)
0374              CALL PUTMAR (TABRAN)
0375              INBUF (PTR) = INBUF (1) - PTR + 1
0376              CALL PUTMAR (INBUF (PTR))
0377              IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0378              CALL OUTMAR
0379              RETURN
0380
0381     C        THIS IS A BITFIELD DEFINITION TO BE OUTPUT. THE FORMAT IS
0382     C        '(TAB) (TAB) <FLDNAM,SIZE,M>-' FOLLOWED BY THE REST OF
0383     C        THE LINE.
0384
0385     50       IF (DEBUG) TYPE 560
0386     560      FORMAT (' ONE BITFIELD OUTPUT')
```

```
0387            CALL PUTMAR (TABSTG)
0388            CALL PUTMAR (TABLAN)
0389            CALL PUTMAR (FLDNAM)
0390            CALL PUTMAR (COMMAS)
0391            IF (VSIZ .EQ. 0) GOTO 52
0392            CALL NUMSTG (BYTSIZ, VSIZ)
0393            CALL PUTMAR (BYTSIZ)
0394    52      CALL PUTMAR (COMMAS)
0395            CALL PUTMAR (AMASK)
0396            CALL PUTMAR (RANHYP)
0397            CALL PUTMAR (SPCSTG)
0398            INBUF (PTR) = INBUF (1) - PTR + 1
0399            CALL PUTMAR (INBUF (PTR))
0400            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0401            CALL OUTMAR
0402            RETURN
0403
0404    C       THIS IS A CONSTANT NAME DEFINITION WITHIN A LIST. THE FORMAT
0405    C       IS '(TAB) (TAB) <FLDNAM,VALUE>-' FOLLOWED BY THE REST OF
0406    C       THE LINE.
0407
0408    60      IF (DEBUG) TYPE 570
0409    570     FORMAT (' LIST CONSTANT OUTPUT')
0410            CALL PUTMAR (TABSTG)
0411            IF ((CONEXP) .AND. (FLDNAM (1) .EQ. 0)) GOTO 61
0412            CALL PUTMAR (TABLAN)
0413            GOTO 62
0414    61      CALL PUTMAR (TABSTG)
0415    62      IF ((CONEXP) .AND. (FLDNAM (1) .EQ. 0)) CALL PUTMAR (TABSTG)
0416            CALL PUTMAR (FLDNAM)
0417            IF (MVALUE (1) .EQ. 0) GOTO 65
0418            IF (FLDNAM (1) .NE. 0) CALL PUTMAR (COMMAS)
0419            IF (.NOT. CONEXP) GOTO 63
0420            IF (FLDNAM (1) .NE. 0) CALL PUTMAR (EXPOPN)
0421    63      CALL PUTMAR (MVALUE)
0422            IF ((.NOT. ENDEXP) .AND. (CONEXP)) GOTO 67
0423            IF (ENDEXP) CALL PUTMAR (EXPCLO)
0424    65      CALL PUTMAR (RANHYP)
0425    67      CALL PUTMAR (SPCSTG)
0426            CALL PUTMAR (RSTLIN)
0427            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0428            CALL OUTMAR
0429            RETURN
0430
0431    C       THIS IS A SINGLE CONSTANT DEFINITION TO BE OUTPUT. THE
0432    C       FORMAT IS '$EQU (TAB) PRENAM\TAGNAM\FLDNAM (TAB) CVALUE'
0433    C       FOLLOWED BY THE REST OF THE LINE.
0434
0435    70      IF (DEBUG) TYPE 580
0436    580     FORMAT (' SINGLE CONSTANT OUTPUT')
0437            CALL PUTMAR (EQUTAB)
0438            CALL PUTMAR (PRENAM)
0439            CALL PUTMAR (TAGNAM)
0440            CALL PUTMAR (FLDNAM)
0441            CALL PUTMAR (TABSTG)
0442            CALL PUTMAR (MVALUE)
0443            CALL PUTMAR (TABSTG)
```

```
0444            CALL PUTMAR (TABSTG)
0445            INBUF (PTR) = INBUF (1) - PTR + 1
0446            CALL PUTMAR (INBUF (PTR))
0447            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0448            CALL OUTMAR
0449            RETURN
0450
0451    C       THIS IS A POSITION MARKING DECLARATION.  ONLY THE COMMENT
0452    C       OF THE LINE IS OUTPUT.
0453
0454    80      IF (DEBUG) TYPE 600
0455    600     FORMAT (' POSITION MARK OUTPUT')
0456            CALL PUTMAR (TABSTG)
0457            CALL PUTMAR (TABSTG)
0458            CALL PUTMAR (TABSTG)
0459            INBUF (PTR) = INBUF (1) - PTR + 1
0460            CALL PUTMAR (INBUF (PTR))
0461            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0462            CALL OUTMAR
0463            RETURN
0464
0465    C       THIS IS REORIGINING COMMAND. THE POINTER IS RESET BY
0466    C       A DECLARATION OF THE FORM '. = (V _UE)' FOLLOWED BY THE
0467    C       REST OF THE LINE.
0468
0469    90      IF (DEBUG) TYPE 610
0470    610     FORMAT (' REORIGIN OUTPUT')
0471            CALL PUTMAR (TABSTG)
0472            CALL PUTMAR (DOTEQS)
0473            CALL NUMSTG (OFFSET, BLFOFS)
0474            CALL PUTMAR (OFFSET)
0475            CALL PUTMAR (SPCSTG)
0476            INBUF (PTR) = INBUF (1) - PTR + 1
0477            CALL PUTMAR (INBUF (PTR))
0478            IF (DEBUG) TYPE 300, (MARBUF (I), I = 2, MARBUF (1) + 1)
0479            CALL OUTMAR
0480            RETURN
0481
0482    C       ERROR REPORTING
0483
0484    100     TYPE 2000
0485    2000    FORMAT (' INVALID OUTPUT LINE TYPE')
0486            RETURN
0487            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	3040	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	312	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	344	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	7595	

ENTRY POINTS

Address	Type	Name
0-00000000		MDOUTL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	2-00000004	I*2	ISAVE
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	2-00000002	I*2	NBYTES	9-0000086C	I*2	NEGCNT
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ
5-00000018	L*2	POSOFF	AP-0000004A	I*2	PTR	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)

10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DCLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)

6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000018E	10	0-000001D8	11	0-000001E8	12	0-00000212	13	0-00000222	15	0-00000317	16
0-00000318	20	0-0000038E	23	0-0000039E	25	0-0000049F	26	0-000004A0	30	0-00000575	35
0-00000619	40	0-00000706	45	0-000007A2	50	0-000007FC	52	0-0000088B	60	0-000008D6	61
0-000008DE	62	0-00000922	63	0-00000943	65	0-0000094C	67	0-000009A2	70	0-00000A6F	80
0-00000B12	90	0-00000BC8	100	1-00000000	290'	1-00000022	300'	1-00000012	490'	1-0000002A	500'
1-0000003A	510'	1-0000004D	520'	1-00000060	530'	1-00000074	540'	1-0000008C	550'	1-000000A8	560'
1-000000BF	570'	1-000000D7	580'	1-000000F1	600'	1-00000109	610'	1-0000011C	2000'		

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	NUMSTG		OUTMAR		PUTMAR

```
0001    C       REVISION HISTORY:
0002    C               23-03-77        CP      WHEN OUTPUTTING BITFIELD MASK,
0003    C                                       AMOUNT TO SHIFT BITS IS VOFSET +
0004    C                                       VSIZ, NOT VOFSET + 1.
0005    C
0006    C               04-04-77        TC      CONDITIONALIZE OUTPUT OF '')'' IN CONSTANTS
0007    C                                       TO AVOID PREMATURLY CLOSING IN THE MIDDLE OF
0008    C                                       MULTI-LINE CONSTANTS
0009    C
0010    C               22-04-77        TC      OUTPUT COMMENTS FROM VIELD
0011    C                                       AND VIELDE (BEGINNING
0012    C                                       AND END OF BITFIELD DEFINITION
0013    C                                       LIST).
0014
0015            SUBROUTINE BDOUTL (PTR)
0016
0017    C       OUTPUTS A DEFINITION TO THE BLISS FILE. THE ARGUMENT
0018    C       PTR POINTS TO THE LOGICAL END OF LINE IN THE INPUT
0019    C       LINE.
0020
0021            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0123
0124            INTEGER PTR, LOCAL
0125
0126            IF (DEBUG) TYPE 300
0127    300     FORMAT (' IN BLISS OUTPUT')
0128            IF (LINTYP .EQ. FIELD) GOTO 10
0129            IF (LINTYP .EQ. SBFLD) GOTO 20
0130            IF (LINTYP .EQ. VIELD) GOTO 30
0131            IF (LINTYP .EQ. VIELDE) GOTO 35
0132            IF (LINTYP .EQ. CONST) GOTO 40
0133            IF (LINTYP .EQ. CONSTE) GOTO 45
0134            IF (LINTYP .EQ. BITFNM) GOTO 50
0135            IF (LINTYP .EQ. CONSTN) GOTO 60
0136            IF (LINTYP .EQ. SCONST) GOTO 70
0137            IF (LINTYP .EQ. MARKPT) GOTO 80
0138            IF (LINTYP .EQ. ORIGIN) GOTO 90
0139            IF (LINTYP .NE. LABELN) GOTO 100
0140
0141    C       THIS IS A LABEL DEFINITION TO BE OUTPUT. THE FORMAT IS
0142    C       'LITERAL (TAB) PRENAM\CTAGNAM\FLDNAM (TAB) = (SPACE) BYTOFF;
0143    C        LITERAL (TAB) PRENAM\KTAGNAM\FLDNAM (TAB) = (SPACE) BYTOFF;'
0144    C       FOLLOWED BY THE REST OF THE LINE.  HERE CTAGNAM IS THE
0145    C       TAGNAM WITH THE SECOND CHARACTER CHANGED TO A 'C',
0146    C       KTAGNAM IS THE TAGNAM WITH THE SECOND CHARACTER CHANGED TO
0147    C       A 'K', AND BYTOFF IS THE CURRENT OFFSET IN THE STRUCTURE
0148    C       EXPRESSED IN BYTES.
0149
0150            IF (DEBUG) TYPE 400
0151    400     FORMAT (' LABEL OUTPUT')
0152            TAGNAM (3) = 'C'
0153            CALL PUTBLI (LITTAB)
0154            CALL PUTBLI (PRENAM)
0155            CALL PUTBLI (TAGNAM)
0156            CALL PUTBLI (FLDNAM)
0157            CALL PUTBLI (TABEQS)
0158            CALL NUMSTG (BYTSIZ, FOFSET)
```

```
0159            CALL PUTBLI (BYTSIZ)
0160            CALL PUTBLI (SEMSPC)
0161            CALL OUTBLI
0162            TAGNAM (3) = 'K'
0163            CALL PUTBLI (LITTAB)
0164            CALL PUTBLI (PRENAM)
0165            CALL PUTBLI (TAGNAM)
0166            CALL PUTBLI (FLDNAM)
0167            CALL PUTBLI (TABEQS)
0168            CALL PUTBLI (BYTSIZ)
0169            CALL PUTBLI (SEMSPC)
0170            CALL PUTBLI (TABSTG)
0171            CALL EXCCMT (INBUF, PTR)
0172            CALL PUTBLI (INBUF (PTR))
0173            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0174    250     FORMAT (' ',90A1)
0175            CALL OUTBLI
0176            RETURN
0177
0178    C       THIS IS A FIELD DEFINITION TO BE OUTPUT. THE FORMAT
0179    C       IS 'MACRO (TAB) PRENAM\TAGNAM\FLDNAM (TAB) = (SPACE)'
0180    C       FOLLOWED BY A BLISS MACRO DEFINITION. THERE ARE FOUR
0181    C       VALUES, THE OFFSET, POSITION, SIZE, AND SIGN. FINALLY THERE
0182    C       IS A '%; (SPACE)' FOLLOWED BY THE REST OF THE LINE.
0183
0184    10      IF (DEBUG) TYPE 410
0185    410     FORMAT (' FIELD OUTPUT')
0186            IF (FLDNAM (1) .EQ. 0) RETURN
0187            CALL NUMSTG (OFFSET, FOFSET)
0188            LOCAL = OBBITS * OFSIZ
0189            CALL NUMSTG (BLSSIZ, LOCAL)
0190            CALL PUTBLI (MACTAB)
0191            CALL PUTBLI (PRENAM)
0192            CALL PUTBLI (OTGNAM)
0193            CALL PUTBLI (OSBNAM)
0194            CALL PUTBLI (TABEQS)
0195            CALL PUTBLI (OFFSET)
0196            CALL PUTBLI (COMMAS)
0197            CALL PUTBLI (ZEROSG)
0198            CALL PUTBLI (COMMAS)
0199
0200    C       SEE WHETHER THE SIZE OF THIS FIELD IS LARGER THAN 32 BITS.
0201    C       IF SO, OUTPUT A ZERO.
0202
0203            IF ((OFSIZ * OUNSIZ) .LT. 5) GOTO 11
0204            CALL PUTBLI (ZEROSG)
0205            GOTO 12
0206    11      CALL PUTBLI (BLSSIZ)
0207    12      CALL PUTBLI (COMMAS)
0208            CALL PUTBLI (OASIGN)
0209            CALL PUTBLI (PCTSEM)
0210            CALL EXCCMT (RSTLIN, 1)
0211            CALL PUTBLI (RSTLIN)
0212            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0213            CALL OUTBLI
0214
0215    C       IF THE SIZE OF THE FIELD DEFINED IS GREATER THAN 4 BYTES,
```

```
0216     C        A SECOND BLISS DECLARATION IS OUTPUT. THIS IS A LITERAL
0217     C        DEFINITION OF THE LENGTH OF THE FIELD. THE FORMAT IS
0218     C        'LITERAL (TAB) PRENAM\TAGNAM (CHANGED TO S)\FLDNAM
0219     C        (TAB) = (SPACE)' FOLLOWED BY THE LENGTH OF THE FIELD IN
0220     C        BYTES AND A SEMI-COLON.
0221
0222              LOCAL = OFSIZ * OUNSIZ
0223              IF (LOCAL .LT. 5) GOTO 13
0224              CALL NUMSTG (BYTSIZ, LOCAL)
0225              IF (DEBUG) TYPE 420
0226     420      FORMAT (' FIELD LENGTH OUTPUT')
0227              CALL PUTBLI (LITTAB)
0228              CALL PUTBLI (PRENAM)
0229              OTGNAM (3) = 'S'
0230              CALL PUTBLI (OTGNAM)
0231              CALL PUTBLI (OSBNAM)
0232              CALL PUTBLI (TABEQS)
0233              CALL PUTBLI (BYTSIZ)
0234              CALL PUTBLI (SEMSPC)
0235              IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0236              CALL OUTBLI
0237     13       RETURN
0238
0239     C        THIS IS A SUBFIELD DEFINITION TO BE OUTPUT. IT IS EXACTLY
0240     C        LIKE A FIELD EXCEPT THAT THE OFFSET FIELD IS DETERMINED
0241     C        BY THE SOFSET VARIABLE INSTEAD OF THE FOFSET VARIABLE
0242     C        AND THE NAMES OF THE STORED VARIABLES ARE DIFFERENT.
0243
0244     20       IF (DEBUG) TYPE 430
0245     430      FORMAT (' SUBFIELD OUTPUT')
0246              IF (OSBNAM (1) .EQ. 0) RETURN
0247              IF (FLDNAM (1) .EQ. 0) RETURN
0248              CALL NUMSTG (OFFSET, BLFOFS)
0249              LOCAL = OBBITS * OFSIZ
0250              CALL NUMSTG (BLSSIZ, LOCAL)
0251              CALL PUTBLI (MACTAB)
0252              CALL PUTBLI (PRENAM)
0253              CALL PUTBLI (OTGNAM)
0254              CALL PUTBLI (OSBNAM)
0255              CALL PUTBLI (TABEQS)
0256              CALL PUTBLI (OFFSET)
0257              CALL PUTBLI (COMMAS)
0258              CALL PUTBLI (ZEROSG)
0259              CALL PUTBLI (COMMAS)
0260
0261     C        SEE WHETHER THE SIZE OF THIS FIELD IS GREATER THAN 32
0262     C        BITS. IF SO, JUST OUTPUT A ZERO IN THE SIZE FIELD.
0263
0264              IF ((OFSIZ * OUNSIZ) .LT. 5) GOTO 21
0265              CALL PUTBLI (ZEROSG)
0266              GOTO 22
0267     21       CALL PUTBLI (BLSSIZ)
0268     22       CALL PUTBLI (COMMAS)
0269              CALL PUTBLI (OASIGN)
0270              CALL PUTBLI (PCTSEM)
0271              CALL EXCCMT (RSTLIN, ;)
0272              CALL PUTBLI (RSTLIN)
```

```
0273            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0274            CALL OUTBLI
0275
0276    C       IF THE SIZE OF THE SUBFIELD DEFINED IS GREATER THAN 4 BYTES,
0277    C       A SECOND BLISS DECLARATION IS OUTPUT. THIS IS A LITERAL
0278    C       DEFINITION OF THE LENGTH OF THE FIELD. THE FORMAT IS
0279    C       'LITERAL (TAB) PRENAM\OTGNAM (CHANGED TO S)\OSBNAM
0280    C       (TAB) = (SPACE)' FOLLOWED BY THE LENGTH OF THE FIELD IN
0281    C       BYTES AND A SEMI-COLON.
0282
0283            LOCAL = OFSIZ * OUNSIZ
0284            IF (LOCAL .LT. 5) GOTO 25
0285            CALL NUMSTG (BYTSIZ, LOCAL)
0286            IF (DEBUG) TYPE 420
0287            CALL PUTBLI (LITTAB)
0288            CALL PUTBLI (PRENAM)
0289            OTGNAM (3) = 'S'
0290            CALL PUTBLI (OTGNAM)
0291            CALL PUTBLI (OSBNAM)
0292            CALL PUTBLI (TABEQS)
0293            CALL PUTBLI (BYTSIZ)
0294            CALL PUTBLI (SEMSPC)
0295            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0296            CALL OUTBLI
0297    25      RETURN
0298
0299    C       THIS IS THE BEGINNING OF A BITFIELD DEFINITION LIST.
0300    C       ONLY THE COMMENT PART IS PRINTED.
0301
0302    30      IF (DEBUG) TYPE 435
0303    435     FORMAT (' BITFIELD OUTPUT')
0304            CALL PUTBLI (TABSTG)
0305            CALL PUTBLI (TABSTG)
0306            CALL PUTBLI (TABSTG)
0307            CALL EXCCMT (INBUF, PTR)
0308            CALL PUTBLI (INBUF (PTR))
0309            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0310            CALL OUTBLI
0311            RETURN
0312
0313    C       THIS IS THE END OF A BITFIELD DEFINITION LIST.
0314    C       ONLY THE COMMENT PART IS PRINTED.
0315
0316    35      IF (DEBUG) TYPE 437
0317    437     FORMAT (' BITFIELD OUTPUT')
0318            CALL PUTBLI (TABSTG)
0319            CALL PUTBLI (TABSTG)
0320            CALL PUTBLI (TABSTG)
0321            CALL EXCCMT (INBUF, PTR)
0322            CALL PUTBLI (INBUF (PTR))
0323            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0324            CALL OUTBLI
0325            RETURN
0326
0327    C       THIS IS THE BEGINNING OF A CONSTANT DEFINITION LIST. THE
0328    C       THIS IS THE BEGINNING OF A CONSTANT DEFINITION LIST. THE
0329    C       FORMAT IS A LINE CONTAINING ONLY THE WORD 'LITERAL'; THEN
```

```
0330     C        A LINE CONTAINING '$EQULST (TAB) ( PRENAM\CONTAG (COMMA) GBL
0331     C        (COMMA) BASE (COMMA) INCREMENT'
0332     C        FOLLOWED BY THE REST OF THE LINE.
0333
0334     40       IF (DEBUG) TYPE 440
0335     440      FORMAT (' CONSTANT LIST OUTPUT')
0336              CALL PUTBLI (LITTAB)
0337              CALL OUTBLI
0338              CALL PUTBLI (EQULST)
0339              CALL PUTBLI (OPAREN)
0340              CALL PUTBLI (CONPRE)
0341              CALL PUTBLI (CONTAG)
0342              CALL PUTBLI (COMGBL)
0343              CALL PUTBLI (BLBASE)
0344              CALL PUTBLI (COMMAS)
0345              CALL PUTBLI (BLINCR)
0346              CALL PUTBLI (SPCSTG)
0347              CALL EXCCMT (INBUF, PTR)
0348              CALL PUTBLI (INBUF (PTR))
0349              IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0350              CALL OUTBLI
0351              RETURN
0352
0353     C        THIS IS THE END OF A CONSTANT DEFINITION LIST TO BE OUTPUT.
0354
0355     45       IF (DEBUG) TYPE 450
0356     450      FORMAT (' CONSTANT LIST END')
0357              CALL PUTBLI (TABPRN)
0358              CALL EXCCMT (INBUF, PTR)
0359              CALL PUTBLI (INBUF (PTR))
0360              IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0361              CALL OUTBLI
0362              RETURN
0363
0364     C        THIS IS A BITFIELD DEFINITION TO BE OUTPUT. THE FORMAT
0365     C        IS 'MACRO (TAB) PRENAM\TAGNAM\FLDNAM (TAB) = (SPACE)'
0366     C        OFFSET FOR STARTING VIELD BYTE, POSITION OF THIS BITFIELD,
0367     C        SIZE OF THIS BITFIELD, AND SIGN, FOLLOWED BY 'PERCENT
0368     C        SEMI-COLON' AND THE REST OF THE LINE.
0369
0370     50       IF (DEBUG) TYPE 500
0371     500      FORMAT (' ONE BITFIELD OUTPUT')
0372              IF (FLDNAM (1) .EQ. 0) GOTO 51
0373              CALL NUMSTG (OFFSET, BLFOFS)
0374              CALL NUMSTG (BYTSIZ, VOFSET)
0375              IF (VSIZ .EQ. 0) VSIZ = 1
0376              CALL NUMSTG (BLSSIZ, VSIZ)
0377              CALL PUTBLI (MACTAB)
0378              CALL PUTBLI (PRENAM)
0379              CALL PUTBLI (TAGNAM)
0380              CALL PUTBLI (FLDNAM)
0381              CALL PUTBLI (TABEQS)
0382              CALL PUTBLI (OFFSET)
0383              CALL PUTBLI (COMMAS)
0384              CALL PUTBLI (BYTSIZ)
0385              CALL PUTBLI (COMMAS)
0386              CALL PUTBLI (BLSSIZ)
```

```
0387            CALL PUTBLI (COMMAS)
0388            CALL PUTBLI (ASIGN)
0389            CALL PUTBLI (PCTSEM)
0390            GOTO 53
0391
0392    51      CALL PUTBLI (TABSTG)
0393            CALL PUTBLI (TABSTG)
0394            CALL PUTBLI (TABSTG)
0395            CALL PUTBLI (TABSTG)
0396
0397    53      CALL EXCCMT (INBUF, PTR)
0398            CALL PUTBLI (INBUF (PTR))
0399            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0400            CALL OUTBLI
0401
0402    C       IF THE MASK FOR THIS FIELD IS REQUIRED, A LITERAL
0403    C       DECLARATION IS OUTPUT FOR THE MASK.
0404
0405            IF ((.NOT. SMASK) .AND. (.NOT. VMASK)) RETURN
0406            IF (FLDNAM(1) .EQ. 0) RETURN
0407            IF (DEBUG) TYPE 510
0408    510     FORMAT (' LITERAL MASK OUTPUT')
0409            LOCAL = VOFSET + VSIZ
0410            CALL NUMSTG (BLSSIZ, LOCAL)
0411            CALL PUTBLI (LITTAB)
0412            CALL PUTBLI (PRENAM)
0413            TAGNAM (3) = 'M'
0414            CALL PUTBLI (TAGNAM)
0415            TAGNAM (3) = 'V'
0416            CALL PUTBLI (FLDNAM)
0417            CALL PUTBLI (TABEQS)
0418            CALL PUTBLI (ONESHF)
0419            CALL PUTBLI (BLSSIZ)
0420            CALL PUTBLI (SPHYSP)
0421            CALL PUTBLI (ONESHF)
0422            CALL PUTBLI (BYTSIZ)
0423            CALL PUTBLI (SEMSPC)
0424            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0425            CALL OUTBLI
0426            RETURN
0427
0428    C       THIS IS A CONSTANT NAME DEFINITION WITHIN A LIST.
0429    C       THE FORMAT IS '(TAB) (COMMA) FLDNAM (COMMA) BVALUE'
0430    C        FOLLOWED BY THE REST OF THE LINE.
0431
0432    60      IF (DEBUG) TYPE 520
0433    520     FORMAT (' CONSTANT NAME OUTPUT')
0434            CALL PUTBLI (TABSTG)
0435            IF ((CONEXP).AND.(FLDNAM(1).EQ.0)) GOTO 67
0436            CALL PUTBLI(COMMAS)
0437            CALL PUTBLI(OPAREN)
0438            CALL PUTBLI(FLDNAM)
0439            CALL PUTBLI(COMMAS)
0440    65      CALL PUTBLI(BVALUE)
0441            IF (ENDEXP .OR. (.NOT. CONEXP))
0442            1   CALL PUTBLI(CPAREN)
0443            CALL PUTBLI(SPCSTG)
```

```
0444            CALL PUTBLI(TABSTG)
0445            CALL EXCCMT(RSTLIN,1)
0446            CALL PUTBLI(RSTLIN)
0447            IF (DEBUG) TYPE 250, (BLIBUF(I), I = 2,BLIBUF(1)+1)
0448            CALL OUTBLI
0449            RETURN
0450
0451    67      CALL PUTBLI(TABSTG)
0452            GOTO 65
0453
0454
0455    C       THIS IS A SINGLE CONSTANT DEFINITION TO BE OUTPUT.
0456    C       THE FORMAT IS 'LITERAL (TAB) (TAB) = (SPACE)' FOLLOWED
0457    C       BY THE VALUE OF THE CONSTANT, THEN '; (SPACE)' AND
0458    C       THE REST OF THE LINE.
0459
0460    70      IF (DEBUG) TYPE 600
0461    600     FORMAT (' SINGLE CONSTANT OUTPUT')
0462            CALL PUTBLI (LITTAB)
0463            CALL PUTBLI (PRENAM)
0464            CALL PUTBLI (TAGNAM)
0465            CALL PUTBLI (FLDNAM)
0466            CALL PUTBLI (TABEQS)
0467            CALL PUTBLI (BVALUE)
0468            CALL PUTBLI (SEMSPC)
0469            CALL PUTBLI (TABSTG)
0470            CALL PUTBLI (TABSTG)
0471            CALL EXCCMT (INBUF, PTR)
0472            CALL PUTBLI (INBUF (PTR))
0473            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0474            CALL OUTBLI
0475            RETURN
0476
0477    C       THIS IS A POSITION MARKING DECLARATION. ONLY THE COMMENT
0478    C       PORTION OF THE LINE IS OUTPUT.
0479
0480    80      IF (DEBUG) TYPE 610
0481    610     FORMAT (' POSITION MARK OUTPUT')
0482            CALL PUTBLI (TABSTG)
0483            CALL PUTBLI (TABSTG)
0484            CALL PUTBLI (TABSTG)
0485            CALL EXCCMT (INBUF, PTR)
0486            CALL PUTBLI (INBUF (PTR))
0487            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0488            CALL OUTBLI
0489            RETURN
0490
0491    C       THIS IS REORIGINING COMMAND. ONLY THE COMMENT PORTION OF
0492    C       THE LINE IS OUTPUT.
0493
0494    90      IF (DEBUG) TYPE 620
0495    620     FORMAT (' REORIGIN OUTPUT')
0496            CALL PUTBLI (TABSTG)
0497            CALL PUTBLI (TABSTG)
0498            CALL PUTBLI (TABSTG)
0499            CALL EXCCMT (INBUF, PTR)
0500            CALL PUTBLI (INBUF (PTR))
```

```
0501            IF (DEBUG) TYPE 250, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0502            CALL OUTBLI
0503            RETURN
0504
0505    C       ERROR REPORTING
0506
0507    100     TYPE 2000
0508    2000    FORMAT (' INVALID OUTPUT LINE TYPE')
0509            RETURN
0510            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	3475	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	355	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	392	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	8121	

ENTRY POINTS

Address	Type	Name
0-00000000		BDOUTL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000002	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	2-00000000	I*2	LOCAL
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM
9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF
AP-0000004@	I*2	PTR	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEOL
5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN
5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-000001C8	10	0-00000269	11	0-00000272	12	0-00000393	13	0-00000394	20	0-00000448	21
0-00000451	22	0-00000582	25	0-00000583	30	0-00000622	35	0-000006C1	40	0-000007A7	45
0-00000837	50	0-000008FD	51	0-0000091D	53	0-00000A7B	60	0-00000AD8	65	0-00000B63	67
0-00000B6E	70	0-00000C3D	80	0-00000CDC	90	0-00000D7B	100	1-00000027	250'	1-00000004	300'
1-00000017	400'	1-0000002F	410'	1-0000003F	420'	1-00000056	430'	1-00000069	435'	1-0000007C	437'
1-0000008F	440'	1-000000A7	450'	1-000000BC	500'	1-000000D3	510'	1-000000EA	520'	1-00000102	600'
1-0000011C	610'	1-00000134	620'	1-00000147	2000'						

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name
	EXCCMT		NUMSTG		OUTBLI		PUTBLI

```
0001            SUBROUTINE OUTFLD
0002
0003    C       OUTPUTS A FIELD OR SUBFIELD DEFINITION. IF THE IMPLICIT ARGUMENT
0004    C       BLKOUT IS TRUE, OUTPUTS A '.BLK' ALLOCATION TO THE MARS FILE.
0005    C       OTHERWISE, OUTPUTS THE FIELD WITHOUT THE ALLOCATION.
0006
0007            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0109
0110            IF (DEBUG) TYPE 490
0111    490     FORMAT (' IN OUTFLD')
0112            CALL MDOUTL (INPTR)
0113            CALL BDOUTL (INPTR)
0114            IF (LINTYP .NE. FIELD) GOTO 10
0115            IF (DEBUG) TYPE 500, FOFSET, OUNSIZ, OFSIZ, BLFOFS
0116    500     FORMAT (' FOFSET ',I3,' OUNSIZ ',I3,' OFSIZ ',I3,' BLFOFS ',I3)
0117            BOFSET = FOFSET
0118            FOFSET = FOFSET + OUNSIZ * OFSIZ
0119            OSBNAM (1) = 0
0120            LASLIN = FIELD
0121            RETURN
0122
0123    10      IF (LINTYP .NE. SBFLD) GOTO 20
0124            IF (DEBUG) TYPE 510, FOFSET, SOFSET, LSBSIZ, BLFOFS
0125    510     FORMAT (' FOFSET ',I3,' SOFSET ',I3,' LSBSIZ ',I3,' BLFOFS ',I3)
0126            SOFSET = SOFSET + LSBSIZ
0127            LASLIN = SBFLD
0128            OSBNAM (1) = 0
0129
0130    20      RETURN
0131            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	272	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	110	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	8	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4289	

ENTRY POINTS

Address	Type	Name
0-00000000		OUTFLD

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-000000AD	10	0-0000010F	20	1-00000000	490'	1-0000000D	500'	1-0000003D	510'

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	BDOUTL		MDOUTL

```
0001              SUBROUTINE OUTBCL
0002
0003        C     OUTPUTS A SINGLE LINE IN A CONSTANT DEFINITION LIST. THE
0004        C     LINE IS BLANK OR HAS ONLY COMMENTS. FOR MARS, IT MUST BEGIN
0005        C     WITH A HYPHEN, FOR BLISS IT CAN GO OUT AS IS.
0006
0007              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0109
0110              CALL PUTMAR (HYPHEN)
0111              CALL PUTMAR (INBUF (1))
0112              IF (DEBUG) TYPE 500, (MARBUF (I), I = 2, MARBUF (1) + 1)
0113        500   FORMAT (' ',90A1)
0114              CALL OUTMAR
0115
0116        C     NOW OUTPUT THE BLISS LINE
0117
0118              CALL EXCCMT (INBUF, 1)
0119              CALL PUTBLI (INBUF (1))
0120              IF (DEBUG) TYPE 500, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0121              CALL OUTBLI
0122
0123              RETURN
0124              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	192	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	12	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	48	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4151	

ENTRY POINTS

Address	Type	Name
0-00000000		OUTBCL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

```
   9-0000021A  I*2  RSTLIN          180  (90)
   6-00000154  I*2  SEMSPC            6  (3)
   6-000000FE  I*2  SPCSTG            4  (2)
   6-000001A8  I*2  SPHYSP            8  (4)
   9-00000092  I*2  STRSTG           32  (16)
   6-00000072  I*2  SUFDEF            8  (4)
   9-00000072  I*2  SUFNAM           32  (16)
   6-0000014C  I*2  TABEQS            8  (4)
   6-000000CE  I*2  TABLAN            6  (3)
   6-000001CA  I*2  TABOPR            6  (3)
   6-000001C0  I*2  TABPRN           10  (5)
   6-000000AC  I*2  TABRAN            6  (3)
   6-0000008C  I*2  TABSTG            4  (2)
   9-00000100  I*2  TAGNAM           32  (16)
   9-0000047A  I*2  TMPVAL          162  (81)
   9-00000000  I*2  TOKSTG           80  (40)
   6-00000238  I*2  UNDVLD           18  (9)
   6-0000007A  I*2  UNITYP            4  (2)
   6-00000192  I*2  ZEROSG            4  (2)
   6-000000A2  I*2  ZRLAHY           10  (5)

LABELS

     Address   Label

   1-00000004  500'

FUNCTIONS AND SUBROUTINES REFERENCED

  Type  Name              Type  Name              Type  Name              Type  Name              Type  Name
        EXCCMT                  OUTBLI                  OUTMAR                  PUTBLI                  PUTMAR
```

```
0001    C       REVISION HISTORY:
0002    C               22-03-77        CP      IF TMP FILE FLAG IS TRUE, OUTPUT
0003    C                                       COUNT AS NEGATIVE ALLOCATION.
0004
0005            SUBROUTINE OUTBLK (COUNT)
0006
0007    C       OUTPUTS A DECLARATION OF BLOCK ALLOCATION TO THE
0008    C       TRANSLATED MARS FILE. THE ARGUMENT COUNT IS THE NUMBER
0009    C       OF BYTES TO ALLOCATE.
0010
0011            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0113
0114            INTEGER COUNT, LOCAL
0115
0116            IF (DEBUG) TYPE 500, COUNT
0117    500     FORMAT (' ALLOCATING ',I3,' BLOCKS')
0118            LOCAL = COUNT / OUNSIZ
0119            IF (COUNT .NE. OUNSIZ * LOCAL) GOTO 20
0120            CALL NUMSTG (BYTSIZ, LOCAL)
0121            GOTO 25
0122    20      CALL NUMSTG (BYTSIZ, COUNT)
0123            OUNTYP (2) = 'B'
0124    25      CALL PUTMAR (TABSTG)
0125            CALL PUTMAR (TABSTG)
0126            CALL PUTMAR (DOTBLK)
0127            CALL PUTMAR (OUNTYP)
0128            CALL PUTMAR (TABSTG)
0129            IF (TMPOUT) CALL PUTMAR (NEGSGN)
0130            CALL PUTMAR (BYTSIZ)
0131            CALL PUTMAR (SPCSTG)
0132            IF (DEBUG) TYPE 510, (MARBUF (I), I = 2, MARBUF (1) + 1)
0133    510     FORMAT (' ',90A1)
0134            CALL OUTMAR
0135            IF (.NOT. TMPOUT) BLFOFS = BLFOFS + COUNT
0136            RETURN
0137            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	276	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	34	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	76	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4285	

ENTRY POINTS

Address	Type	Name
0-00000000		OUTBLK

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
AP-00000004@	I*2	COUNT	8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL
11-00000C04	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT
5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ
2-00000002	I*2	I	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
2-00000000	I*2	LOCAL	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR
10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ
5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEOL
5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN
5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label
0-00000054	20	0-0000006A	25	1-00000000	500'	1-0000001A	510'

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	NUMSTG		OUTMAR		PUTMAR

```
0001    C       REVISION HISTORY:
0002    C               22-03-77        CP      IF OUTPUTTING TO TMP FILE, CALL TMPWRT
0003    C                                       INSTEAD OF OUTMAR AND OUTBLI.
0004
0005            SUBROUTINE OUT2LN
0006
0007    C       THIS ROUTINE SIMPLY OUTPUTS A SINGLE LINE TO BOTH OUTPUT
0008    C       FILES. THE LINE IS IDENTICAL TO THE INPUT LINE IN THE MARS
0009    C       FILE, AND HAS SEMI-COLONS CHANGED TO EXCLAMATION POINTS
0010    C       IN THE BLISS FILE.
0011    C
0012    C       IF OUTPUTTING TO THE TMP FILE, JUST OUTPUT THE LINE ONCE.
0013
0014            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0116
0117            INTEGER I
0118
0119    C       OUTPUT THE MARS LINE.
0120
0121            IF (TMPOUT) GOTO 20
0122            CALL PUTMAR (INBUF)
0123            CALL OUTMAR
0124            IF (.NOT. ERROUT) GOTO 10
0125            RETURN
0126
0127    C       NOW THE BLISS LINE.
0128
0129    10      I = 1
0130            CALL EXCCMT (INBUF, I)
0131            CALL PUTBLI (INBUF)
0132            CALL OUTBLI
0133            RETURN
0134
0135    20      CALL TMPWRT
0136            RETURN
0137
0138            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	75	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	24	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3998	

ENTRY POINTS

Address	Type	Name
0-00000000		OUT2LN

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)

```
  6-0000017E  I*2  BLSSIZ          20  (10)
  9-000003D8  I*2  BVALUE         162  (81)
  6-000000EA  I*2  BYTSIZ          20  (10)
  6-000001B4  I*2  COMGBL          12  (6)
  6-000000C4  I*2  COMMAS           4  (2)
  6-00000112  I*2  CONBAS          20  (10)
  6-00000126  I*2  CONINC          20  (10)
  9-0000012C  I*2  CONPRE          32  (16)
  9-0000014C  I*2  CONTAG          32  (16)
  9-000007A6  I*2  CONTEX         198  (9, 11)
  6-000001D6  I*2  CPAREN           4  (2)
  6-000001D0  I*2  CPRCOM           6  (3)
  9-00000170  I*2  CVALUE         162  (81)
  6-0000004C  I*2  DEFEND          20  (10)
  6-00000022  I*2  DEFINI          20  (10)
  6-000001DE  I*2  DOLBIT          26  (13)
  6-000001F8  I*2  DOLBYT          28  (14)
  6-00000036  I*2  DOLDEF          12  (6)
  6-00000214  I*2  DOLFLD          24  (12)
  6-00000016  I*2  DOLGBL          12  (6)
  6-00000234  I*2  DOLLAR           4  (2)
  6-00000090  I*2  DOLVLD          18  (9)
  6-000000DE  I*2  DOTBLK          12  (6)
  6-00000042  I*2  DOTEQS          10  (5)
  6-00000000  I*2  DOTMAC          22  (11)
  6-00000060  I*2  ENDMAC          18  (9)
  6-000000B2  I*2  EQULST          18  (9)
  6-00000102  I*2  EQUTAB          12  (6)
  6-0000007E  I*2  EXCLSP          14  (7)
  6-00000230  I*2  EXPCLO           4  (2)
  6-0000022C  I*2  EXPOPN           4  (2)
  9-000000B8  I*2  FLDNAM          72  (36)
  6-000001B0  I*2  HYPHEN           4  (2)
 10-00000000  I*2  INBUF          166  (83)
  6-000000C8  I*2  LANHYP           6  (3)
  3-00000000  L*1  LINE           133  (133)
  6-0000013A  I*2  LITTAB          18  (9)
  6-0000015A  I*2  MACTAB          16  (8)
 10-000000AA  I*2  MARBUF         240  (120)
  9-000005C0  I*2  MRBASE         162  (81)
  9-00000704  I*2  MRINCR         162  (81)
  9-00000336  I*2  MVALUE         162  (81)
  3-0000010A  L*1  NAME            32  (32)
  7-00000000  I*2  NEGSGN           4  (2)
  3-0000012A  L*1  NUMSTR         133  (133)
  6-000001DA  I*2  OASIGN           4  (2)
  6-0000016A  I*2  OFFSET          20  (10)
  6-000001A2  I*2  ONESHF           6  (3)
  6-0000010E  I*2  OPAREN           4  (2)
  9-000002CE  I*2  OSBNAM          32  (16)
  9-000002EE  I*2  OTGNAM          32  (16)
  9-0000030E  I*2  OUNTYP          32  (16)
  6-0000019A  I*2  PCTSEM           8  (4)
  3-00000085  L*1  PREFIX         133  (133)
  9-00000052  I*2  PRENAM          32  (16)
  6-000000D4  I*2  RANHYP           6  (3)
  9-0000021A  I*2  RSTLIN         180  (90)
```

6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label
0-00000028	10	0-00000043	20

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	EXCCMT		OUTBLI		OUTMAR		PUTBLI		PUTMAR		TMPWRT

```
0001    C       REVISION HISTORY:
0002    C               23-03-77        CP      OUTPUT SUFNAM INSTEAD OF SUFDEF.
0003    C
0004    C               19-01-78        TC      OUTPUT SUFNAM AS A FINAL ARGUMENT
0005    C                                       TO DEFEND.
0006    C
0007    C               18-02-80                TIM HALVORSEN
0008    C                                       OUTPUT $ ON FRONT OF MACRO NAME
0009    C                                       ONLY IF SYSTEM STRUCTURE ($STRUCT)
0010
0011            SUBROUTINE OUTSTE
0012
0013    C       FORMATS AND OUTPUTS THE END MACRO DEFINITIONS FOR A
0014    C       STRUCTURE TO MARS. THEN FORMATS AND OUTPUTS ONLY
0015    C       THE COMMENTS FROM THE LINE TO BLISS.
0016
0017            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0119
0120    C       IF (DEBUG) TYPE 400
0121    400     FORMAT (' IN OUTSTE')
0122            MARBUF (1) = 1
0123            CALL OUTMAR
0124            IF (.NOT. ERROUT) GOTO 5
0125            RETURN
0126
0127    5       CALL PUTMAR (DEFEND)
0128    C       IF (DEBUG) TYPE 410, (DEFEND (I), I = 2, DEFEND (1) + 1)
0129    410     FORMAT (' ',90A1)
0130            CALL PUTMAR (PRENAM)
0131            CALL PUTMAR (DOLGBL)
0132            CALL PUTMAR (COMMAS)
0133            CALL PUTMAR (SUFNAM)
0134            INBUF (INPTR) = INBUF (1) - INPTR + 1
0135            CALL PUTMAR (INBUF (INPTR))
0136    C       IF (DEBUG) TYPE 410, (MARBUF (I), I = 2, MARBUF (1) + 1)
0137            CALL OUTMAR
0138            IF (.NOT. ERROUT) GOTO 10
0139            RETURN
0140
0141    10      MARBUF (1) = 1
0142            CALL OUTMAR
0143            IF (.NOT. ERROUT) GOTO 20
0144            RETURN
0145
0146    20      CALL PUTMAR (ENDMAC)
0147    C       IF (DEBUG) TYPE 410, (ENDMAC (I), I = 2, ENDMAC (1) + 1)
0148            IF (TAGNAM (2) .EQ. '$') CALL PUTMAR (DOLLAR)
0149            CALL PUTMAR (PRENAM)
0150            CALL PUTMAR (SUFNAM)
0151            IF (DEBUG) TYPE 410, (MARBUF (I), I = 2, MARBUF (1) + 1)
0152            CALL OUTMAR
0153            IF (.NOT. ERROUT) GOTO 30
0154            RETURN
0155
0156    30      CALL EXCCMT (INBUF, INPTR)
0157            CALL PUTBLI (INBUF (INPTR))
0158            CALL OUTBLI
```

```
0159          RETURN
0160          END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	294	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	8	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	96	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4297	

ENTRY POINTS

Address	Type	Name
0-00000000		OUTSTE

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-00C0016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

```
  9-00000662  I*2  BLINCR      162  (81)
  6-0000017E  I*2  BLSSIZ       20  (10)
  9-000003D8  I*2  BVALUE      162  (81)
  6-000000EA  I*2  BYTSIZ       20  (10)
  6-000001B4  I*2  COMGBL       12  (6)
  6-000000C4  I*2  COMMAS        4  (2)
  6-00000112  I*2  CONBAS       20  (10)
  6-00000126  I*2  CONINC       20  (10)
  9-0000012C  I*2  CONPRE       32  (16)
  9-0000014C  I*2  CONTAG       32  (16)
  9-000007A6  I*2  CONTEX      198  (9, 11)
  6-000001D6  I*2  CPAREN        4  (2)
  6-000001D0  I*2  CPRCOM        6  (3)
  9-00000170  I*2  CVALUE      162  (81)
  6-0000004C  I*2  DEFEND       20  (10)
  6-00000022  I*2  DEFINI       20  (10)
  6-000001DE  I*2  DOLBIT       26  (13)
  6-000001F8  I*2  DOLBYT       28  (14)
  6-00000036  I*2  DOLDEF       12  (6)
  6-00000214  I*2  DOLFLD       24  (12)
  6-00000016  I*2  DOLGBL       12  (6)
  6-00000234  I*2  DOLLAR        4  (2)
  6-00000090  I*2  DOLVLD       18  (9)
  6-000000DE  I*2  DOTBLK       12  (6)
  6-00000042  I*2  DOTEQS       10  (5)
  6-00000000  I*2  DOTMAC       22  (11)
  6-00000060  I*2  ENDMAC       18  (9)
  6-000000B2  I*2  EQULST       18  (9)
  6-00000102  I*2  EQUTAB       12  (6)
  6-0000007E  I*2  EXCLSP       14  (7)
  6-00000230  I*2  EXPCLO        4  (2)
  6-0000022C  I*2  EXPOPN        4  (2)
  9-000000B8  I*2  FLDNAM       72  (36)
  6-000001B0  I*2  HYPHEN        4  (2)
 10-00000000  I*2  INBUF       166  (83)
  6-000000C8  I*2  LANHYP        6  (3)
  3-00000000  L*1  LINE        133  (133)
  6-0000013A  I*2  LITTAB       18  (9)
  6-0000015A  I*2  MACTAB       16  (8)
 10-000000AA  I*2  MARBUF      240  (120)
  9-000005C0  I*2  MRBASE      162  (81)
  9-00000704  I*2  MRINCR      162  (81)
  9-00000336  I*2  MVALUE      162  (81)
  3-0000010A  L*1  NAME         32  (32)
  7-00000000  I*2  NEGSGN        4  (2)
  3-0000012A  L*1  NUMSTR      133  (133)
  6-000001DA  I*2  OASIGN        4  (2)
  6-0000016A  I*2  OFFSET       20  (10)
  6-000001A2  I*2  ONESHF        6  (3)
  6-0000010E  I*2  OPAREN        4  (2)
  9-000002CE  I*2  OSBNAM       32  (16)
  9-000002EE  I*2  OTGNAM       32  (16)
  9-0000030E  I*2  OUNTYP       32  (16)
  6-0000019A  I*2  PCTSTM        8  (4)
  3-00000085  L*1  PREFIX      133  (133)
  9-00000052  I*2  PRENAM       32  (16)
  6-000000D4  I*2  RANHYP        6  (3)
```

```
  9-0000021A  I*2  RSTLIN    180  (90)
  6-00000154  I*2  SEMSPC      6  (3)
  6-000000FE  I*2  SPCSTG      4  (2)
  6-000001A8  I*2  SPHYSP      8  (4)
  9-00000092  I*2  STRSTG     32  (16)
  6-00000072  I*2  SUFDEF      8  (4)
  9-00000072  I*2  SUFNAM     32  (16)
  6-0000014C  I*2  TABEQS      8  (4)
  6-000000CE  I*2  TABLAN      6  (3)
  6-000001CA  I*2  TABOPR      6  (3)
  6-000001C0  I*2  TABPRN     10  (5)
  6-000000AC  I*2  TABRAN      6  (3)
  6-0000008C  I*2  TABSTG      4  (2)
  9-00000100  I*2  TAGNAM     32  (16)
  9-0000047A  I*2  TMPVAL    162  (81)
  9-00000000  I*2  TOKSTG     80  (40)
  6-00000238  I*2  UNDVLD     18  (9)
  6-0000007A  I*2  UNITYP      4  (2)
  6-00000192  I*2  ZEROSG      4  (2)
  6-000000A2  I*2  ZRLAHY     10  (5)

LABELS

    Address   Label       Address   Label       Address   Label       Address   Label       Address   Label       Address   Label
  0-00000025  5         0-00000079  10        0-0000008E  20        0-00000103  30          **      400'      1-00000000  410'

FUNCTIONS AND SUBROUTINES REFERENCED

  Type  Name              Type  Name              Type  Name              Type  Name              Type  Name
        EXCCMT                  OUTBLI                  OUTMAR                  PUTBLI                  PUTMAR
```

```
0001    C       REVISION HISTORY:
0002    C               23-03-77        CP      OUTPUT SUFNAM INSTEAD OF SUFDEF.
0003    C
0004    C               18-02-80                TIM HALVORSEN
0005    C                                       OUTPUT $ ON FRONT OF MACRO NAME
0006    C                                       ONLY IF SYSTEM STRUCTURE ($STRUCT)
0007
0008            SUBROUTINE OUTSTR
0009
0010    C       FORMATS THE MACRO DEFINITION OF A DATA STRUCTURE AND
0011    C       OUTPUTS IT TO THE MARS FILE. FORMATS AND OUTPUTS THE COMMENT
0012    C       PART OF THE LINE TO THE BLISS FILE.
0013
0014            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0116
0117    C       FIRST OUTPUT THREE LINES FOR MARS
0118
0119    C       IF (DEBUG) TYPE 400
0120    400     FORMAT (' IN OUTSTR')
0121            CALL PUTMAR (DOTMAC)
0122            IF (TAGNAM (2) .EQ. '$') CALL PUTMAR (DOLLAR)
0123    C       IF (DEBUG) TYPE 410, (DOTMAC (I), I = 2, DOTMAC (1) + 1)
0124            INPTR = INPTR + 1
0125    410     FORMAT (' ',90A1)
0126            CALL PUTMAR (PRENAM)
0127            CALL PUTMAR (SUFNAM)
0128    C       IF (DEBUG) TYPE 410, (PRENAM (I), I = 2, PRENAM (1) + 1)
0129            CALL PUTMAR (DOLGBL)
0130    C       IF (DEBUG) TYPE 410, (DOLGBL (I), I = 2, DOLGBL (1) + 1)
0131            INBUF (INPTR) = INBUF (1) - INPTR + 1
0132            CALL PUTMAR (INBUF (INPTR))
0133            IF (DEBUG) TYPE 410, (MARBUF (I), I = 2, MARBUF (1) + 1)
0134            CALL OUTMAR
0135            IF (.NOT. ERROUT) GOTO 10
0136            RETURN
0137
0138    10      MARBUF (1) = 1
0139            CALL OUTMAR
0140            IF (.NOT. ERROUT) GOTO 20
0141            RETURN
0142
0143    20      CALL PUTMAR (DEFINI)
0144    C       IF (DEBUG) TYPE 410, (DEFINI (I), I = 2, DEFINI (1) + 1)
0145            CALL PUTMAR (PRENAM)
0146            CALL PUTMAR (DOLGBL)
0147    C       IF (DEBUG) TYPE 410, (MARBUF (I), I = 2, MARBUF (1) + 1)
0148            CALL OUTMAR
0149            IF (.NOT. ERROUT) GOTO 30
0150            RETURN
0151
0152    30      MARBUF (1) = 1
0153            CALL OUTMAR
0154            IF (.NOT. ERROUT) GOTO 40
0155            RETURN
0156
0157    40      CALL PUTBLI (EXCLSP)
0158            CALL PUTBLI (PRENAM)
```

```
0159            CALL PUTBLI (SUFNAM)
0160            CALL PUTBLI (TABSTG)
0161            CALL EXCCMT (INBUF, INPTR)
0162            CALL PUTBLI (INBUF (INPTR))
0163            IF (DEBUG) TYPE 410, (BLIBUF (I), I = 2, BLIBUF (1) + 1)
0164            CALL OUTBLI
0165            RETURN
0166            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	380	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	8	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	120	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4407	

ENTRY POINTS

Address	Type	Name
0-00000000		OUTSTR

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	B'NVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

```
  9-00000662  I*2  BLINCR      162  (81)
  6-0000017E  I*2  BLSSIZ       20  (10)
  9-000003D8  I*2  BVALUE      162  (81)
  6-000000EA  I*2  BYTSIZ       20  (10)
  6-000001B4  I*2  COMGBL       12  (6)
  6-000000C4  I*2  COMMAS        4  (2)
  6-00000112  I*2  CONBAS       20  (10)
  6-00000126  I*2  CONINC       20  (10)
  9-0000012C  I*2  CONPRE       32  (16)
  9-0000014C  I*2  CONTAG       32  (16)
  9-000007A6  I*2  CONTEX      198  (9, 11)
  6-000001D6  I*2  CPAREN        4  (2)
  6-000001D0  I*2  CPRCOM        6  (3)
  9-00000170  I*2  CVALUE      162  (81)
  6-0000004C  I*2  DEFEND       20  (10)
  6-00000022  I*2  DEFINI       20  (10)
  6-000001DE  I*2  DOLBIT       26  (13)
  6-000001F8  I*2  DOLBYT       28  (14)
  6-00000036  I*2  DOLDEF       12  (6)
  6-00000214  I*2  DOLFLD       24  (12)
  6-00000016  I*2  DOLGBL       12  (6)
  6-00000234  I*2  DOLLAR        4  (2)
  6-00000090  I*2  DOLVLD       18  (9)
  6-000000DE  I*2  DOTBLK       12  (6)
  6-00000042  I*2  DOTEQS       10  (5)
  6-00000000  I*2  DOTMAC       22  (11)
  6-00000060  I*2  ENDMAC       18  (9)
  6-000000B2  I*2  EQULST       18  (9)
  6-00000102  I*2  EQUTAB       12  (6)
  6-0000007E  I*2  EXCLSP       14  (7)
  6-00000230  I*2  EXPCLO        4  (2)
  6-0000022C  I*2  EXPOPN        4  (2)
  9-000000B8  I*2  FLDNAM       72  (36)
  6-000001B0  I*2  HYPHEN        4  (2)
 10-00000000  I*2  INBUF       166  (83)
  6-000000C8  I*2  LANHYP        6  (3)
  3-00000000  L*1  LINE        133  (133)
  6-0000013A  I*2  LITTAB       18  (9)
  6-0000015A  I*2  MACTAB       16  (8)
 10-000000AA  I*2  MARBUF      240  (120)
  9-000005C0  I*2  MRBASE      162  (81)
  9-00000704  I*2  MRINCR      162  (81)
  9-00000336  I*2  MVALUE      162  (81)
  3-0000010A  L*1  NAME         32  (32)
  7-00000000  I*2  NEGSGN        4  (2)
  3-0000012A  L*1  NUMSTR      133  (133)
  6-000001DA  I*2  OASIGN        4  (2)
  6-0000016A  I*2  OFFSET       20  (10)
  6-000001A2  I*2  ONESHF        6  (3)
  6-0000010E  I*2  OPAREN        4  (2)
  9-000002CE  I*2  OSBNAM       32  (16)
  9-000002EE  I*2  OTGNAM       32  (16)
  9-0000030E  I*2  OUNTYP       32  (16)
  6-0000019A  I*2  PCTSEM        8  (4)
  3-00000085  L*1  PREFIX      133  (133)
  9-00000052  I*2  PRENAM       32  (16)
  6-000000D4  I*2  RANHYP        6  (3)
```

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-000000AD	10	0-000000C2	20	0-000000EA	30	0-000000FF	40	**	400'	1-00000000	410'

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	EXCCMT		OUTBLI		OUTMAR		PUTBLI		PUTMAR

```
0001              SUBROUTINE OUTCNL
0002
0003        C     OUTPUTS THE CLOSING OF A CONSTANT NAME DEFINITION LIST
0004        C     AND THE BEGINNING OF ANOTHER NAMED THE SAME AS THE LAST ONE.
0005
0006              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0108
0109              IF (DEBUG) TYPE 300
0110        300   FORMAT (' CONSTANT LIST REPEAT')
0111
0112              CALL PUTMAR (TABSTG)
0113              CALL PUTMAR (TABRAN)
0114              CALL OUTMAR
0115
0116              CALL PUTMAR (EQULST)
0117              CALL PUTMAR (CONPRE)
0118              CALL PUTMAR (CONTAG)
0119              CALL PUTMAR (DOLGBL)
0120              CALL PUTMAR (COMMAS)
0121              CALL PUTMAR (COMMAS)
0122              CALL PUTMAR (MRINCR)
0123              CALL PUTMAR (COMMAS)
0124              CALL PUTMAR (LANHYP)
0125              CALL OUTMAR
0126
0127              RETURN
0128              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	142	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	24	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	72	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4137	

ENTRY POINTS

Address	Type	Name
0-00000000		OUTCNL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

OC

```
  9-0000021A  I*2  RSTLIN          180  (90.
  6-00000154  I*2  SEMSPC            6  (3)
  6-000000FE  I*2  SPCSTG            4  (2)
  6-000001A8  I*2  SPHYSP            8  (4)
  9-00000092  I*2  STRSTG           32  (16)
  6-00000072  I*2  SUFDEF            8  (4)
  9-00000072  I*2  SUFNAM           32  (16)
  6-0000014C  I*2  TABEQS            8  (4)
  6-000000CE  I*2  TABLAN            6  (3)
  6-000001CA  I*2  TABOPR            6  (3)
  6-000001C0  I*2  TABPRN           10  (5)
  6-000000AC  I*2  TABRAN            6  (3)
  6-0000008C  I*2  TABSTG            4  (2)
  9-00000100  I*2  TAGNAM           32  (16)
  9-0000047A  I*2  TMPVAL          162  (81)
  9-00000000  I*2  TOKSTG           80  (40)
  6-00000238  I*2  UNDVLD           18  (9)
  6-0000007A  I*2  UNITYP            4  (2)
  6-00000192  I*2  ZEROSG            4  (2)
  6-000000A2  I*2  ZRLAHY           10  (5)

LABELS

     Address   Label

  1-00000000  300'

FUNCTIONS AND SUBROUTINES REFERENCED

  Type  Name              Type  Name
        OUTMAR                  PUTMAR
```

```
0001              SUBROUTINE TMPWRT
0002
0003      C       THIS IS A NEW ROUTINE FOR VERSION 1.3.
0004      C
0005      C       IT OUTPUTS A LINE FROM THE SOURCE FILE TO THE TMP FILE.
0006      C       THE LINE IS IDENTICAL TO THE SOURCE LINE, EXCEPT THAT
0007      C       A LEADING MINUS HAS BEEN CHANGED TO A PLUS IN
0008      C       THE CASE THAT THE LINE IS A FIELD DEFINITION.
0009
0010              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0112
0113              WRITE (TMP) INBUF (1), (INBUF (I), I = 2, INBUF (1) + 1)
0114              RETURN
0115              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	72	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	16	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3987	

ENTRY POINTS

Address	Type	Name
0-00000000		TMPWRT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR

9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS				
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS				
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK				
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB				
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP				
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK				
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ										

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)

9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

```
0001     C       Version V02-001
0002     C
0003     C*****************************************************************************
0004     C*                                                                           *
0005     C*  COPYRIGHT (c) 1980                                                       *
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0020     C*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
0021     C*                                                                           *
0022     C*****************************************************************************
0023     C
0024     C       REVISION HISTORY:
0025     C               22-03-77        CP      ADD NEGSGN FOR NEGATIVE POSITIONING.
0026     C
0027     C               29-06-77        TC      CHANGED STRING FOR DOLBYT FROM
0028     C                                       '$BYTEPOSITION' TO '$BYTEOFFSET'
0029     C                                       (2.4)
0030     C
0031     C               18-02-80                TIM HALVORSEN
0032     C                                       REMOVED $ FROM DOLMAC AND ADDED NEW
0033     C                                       STRING DOLLAR AND UNDVLD
0034
0035
0036              SUBROUTINE INISTG
0037
0038     C        THIS ROUTINE INITIALIZES A SET OF STRINGS THAT ARE USED
0039     C        OVER AND OVER AGAIN IN OUTPUT LINES FOR THE BLISS AND MARS
0040     C        TRANSLATED FILES.
0041
0042     C        EACH CALL TO LITSTG CONVERTS A STRING LITERAL INTO A COUNTED
0043     C        STRING THAT IS STORED IN THE ARRAY LISTED AS THE FIRST
0044     C        PARAMETER.
0045
0046              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0148
0149              CALL LITSTG (DOTMAC, '  .MACRO  ', 8)
0150              CALL LITSTG (DOLLAR, '$', 1)
0151              CALL LITSTG (DOTBLK, '  .BLK', 5)
0152              CALL LITSTG (DOLGBL, ',$GBL', 5)
0153              CALL LITSTG (DEFINI, '  $DEFINI ', 9)
0154              CALL LITSTG (DOLDEF, '$DEF      ', 5)
0155              CALL LITSTG (DEFEND, '  $DEFEND ', 9)
0156              CALL LITSTG (ENDMAC, '  .ENDM   ', 7)
0157              CALL LITSTG (SUFDEF, 'DEF', 3)
0158              CALL LITSTG (AMASK, 'M', 1)
```

```
0159            CALL LITSTG (UNITYP, 'L', 1)
0160            CALL LITSTG (TABSTG, ' ', 1)
0161            CALL LITSTG (SPCSTG, ' ', 1)
0162            CALL LITSTG (DOLVLD, '  $VIELD  ', 8)
0163            CALL LITSTG (UNDVLD, '   VIELD  ', 8)
0164            CALL LITSTG (ZRLAHY, '0,?-', 4)
0165            CALL LITSTG (TABRAN, ' >', 2)
0166            CALL LITSTG (EQULST, '$EQULST ', 8)
0167            CALL LITSTG (EQUTAB, '$EQU     ', 5)
0168            CALL LITSTG (COMMAS, ',', 1)
0169            CALL LITSTG (LANHYP, '<-', 2)
0170            CALL LITSTG (TABLAN, '  <', 2)
0171            CALL LITSTG (RANHYP, '>-', 2)
0172            CALL LITSTG (LITTAB, 'LITÉRAL  ', 8)
0173            CALL LITSTG (TABEQS, '  = ', 3)
0174            CALL LITSTG (SEMSPC, '; ', 2)
0175            CALL LITSTG (MACTAB, 'MACRO           ', 7)
0176            CALL LITSTG (ZEROSG, '0', 1)
0177            CALL LITSTG (PCTSEM, '%; ', 3)
0178            CALL LITSTG (ONESHF, '1^', 2)
0179            CALL LITSTG (SPHYSP, ' - ', 3)
0180            CALL LITSTG (HYPHEN, '-', 1)
0181            CALL LITSTG (OUNTYP, 'B', 1)
0182            CALL LITSTG (COMGBL, ',GBL,', 5)
0183            CALL LITSTG (TABPRN, '  ); ', 4)
0184            CALL LITSTG (TABOPR, '  (', 2)
0185            CALL LITSTG (CPRCOM, '),', 2)
0186            CALL LITSTG (CPAREN, ')', 1)
0187            CALL LITSTG (DOLBIT, '$BITPOSITION', 12)
0188            CALL LITSTG (DOLBYT, '$BYTEOFFSET', 11)
0189            CALL LITSTG (DOLFLD, '$FIELDWIDTH', 11)
0190            CALL LITSTG (EXPOPN, '<', 1)
0191            CALL LITSTG (EXPCLO, '>', 1)
0192            CALL LITSTG (OPAREN, '(', 1)
0193            CALL LITSTG (EXCLSP, '!...$', 5)
0194            CALL LITSTG (DOTEQS, '. = ', 4)
0195            CALL LITSTG (NEGSGN, '-', 1)
0196            RETURN
0197            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	428	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	275	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	1120	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	5722	

ENTRY POINTS

Address	Type	Name
0-00000000		INISTG

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

```
  9-00000662  I*2  BLINCR          162  (81)
  6-0000017E  I*2  BLSSIZ           20  (10)
  9-000003D8  I*2  BVALUE          162  (81)
  6-000000EA  I*2  BYTSIZ           20  (10)
  6-000001B4  I*2  COMGBL           12  (6)
  6-000000C4  I*2  COMMAS            4  (2)
  6-00000112  I*2  CONBAS           20  (10)
  6-00000126  I*2  CONINC           20  (10)
  9-0000012C  I*2  CONPRE           32  (16)
  9-0000014C  I*2  CONTAG           32  (16)
  9-000007A6  I*2  CONTEX          198  (9, 11)
  6-000001D6  I*2  CPAREN            4  (2)
  6-000001D0  I*2  CPRCOM            6  (3)
  9-00000170  I*2  CVALUE          162  (81)
  6-0000004C  I*2  DEFEND           20  (10)
  6-00000022  I*2  DEFINI           20  (10)
  6-000001DE  I*2  DOLBIT           26  (13)
  6-000001F8  I*2  DOLBYT           28  (14)
  6-00000036  I*2  DOLDEF           12  (6)
  6-00000214  I*2  DOLFLD           24  (12)
  6-00000016  I*2  DOLGBL           12  (6)
  6-00000234  I*2  DOLLAR            4  (2)
  6-00000090  I*2  DOLVLD           18  (9)
  6-000000DE  I*2  DOTBLK           12  (6)
  6-00000042  I*2  DOTEQS           10  (5)
  6-00000000  I*2  DOTMAC           22  (11)
  6-00000060  I*2  ENDMAC           18  (9)
  6-000000B2  I*2  EQULST           18  (9)
  6-00000102  I*2  EQUTAB           12  (6)
  6-0000007E  I*2  EXCLSP           14  (7)
  6-00000230  I*2  EXPCLO            4  (2)
  6-0000022C  I*2  EXPOPN            4  (2)
  9-000000B8  I*2  FLDNAM           72  (36)
  6-000001B0  I*2  HYPHEN            4  (2)
 10-00000000  I*2  INBUF           166  (83)
  6-000000C8  I*2  LANHYP            6  (3)
  3-00000000  L*1  LINE            133  (133)
  6-0000013A  I*2  LITTAB           18  (9)
  6-0000015A  I*2  MACTAB           16  (8)
 10-000000AA  I*2  MARBUF          240  (120)
  9-000005C0  I*2  MRBASE          162  (81)
  9-00000704  I*2  MRINCR          162  (81)
  9-00000336  I*2  MVALUE          162  (81)
  3-0000010A  L*1  NAME             32  (32)
  7-00000000  I*2  NEGSGN            4  (2)
  3-0000012A  L*1  NUMSTR          133  (133)
  6-000001DA  I*2  OASIGN            4  (2)
  6-0000016A  I*2  OFFSET           20  (10)
  6-000001A2  I*2  ONESHF            6  (3)
  6-0000010E  I*2  OPAREN            4  (2)
  9-000002CE  I*2  OSBNAM           32  (16)
  9-000002EE  I*2  OTGNAM           32  (16)
  9-0000030E  I*2  OUNTYP           32  (16)
  6-0000019A  I*2  PCTSEM            8  (4)
  3-00000085  L*1  PREFIX          133  (133)
  9-00000052  I*2  PRENAM           32  (16)
  6-000000D4  I*2  RANHYP            6  (3)
```

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZPLAHY	10	(5)

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
	LITSTG

```
0001              SUBROUTINE CMPSTG (STGONE, STGTWO)
0002
0003    C         COMPARES TWO COUNTED STRINGS. RETURNS A .TRUE. IN STGEQL IF
0004    C         THEY MATCH EXACTLY. OTHERWISE RETURNS A .FALSE. IN STGEQL.
0005
0006    C         STGTWO IS THE CONTROL STRING, I.E., HAS A LENGTH COUNT
0007    C         AS LONG AS THE STRING MUST BE TO MATCH.
0008
0009              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0111
0112              INTEGER STGONE (*), STGTWO (*)
0113
0114    C         IF (DEBUG) TYPE 1000, (STGONE (I), I = 2, STGONE (1) + 1),
0115    C         1       (STGTWO (I), I = 2, STGTWO (1) + 1)
0116    1000      FORMAT (' STRINGS ARE ',40A1)
0117
0118              DO 10 I = 1, STGTWO (1) + 1
0119              IF (STGONE (I) .EQ. STGTWO (I)) GOTO 10
0120              STGEQL = .FALSE.
0121              RETURN
0122    10        CONTINUE
0123              STGEQL = .TRUE.
0124              RETURN
0125              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	87	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	44	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4030	

ENTRY POINTS

Address	Type	Name
0-00000000		CMPSTG

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000732	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-00000 2A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-0000C 16	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-0000C004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-0000 0010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-000C 0000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-000C 051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00 000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0 000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-0 0000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUTSIZ	5-0 0018	L*2	POSOFF	5 0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	1 -00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)

```
  6-00000102  I*2  EQUTAB          12  (6)
  6-0000007E  I*2  EXCLSP          14  (7)
  6-00000230  I*2  EXPCLO           4  (2)
  6-0000022C  I*2  EXPOPN           4  (2)
  9-000000B8  I*2  FLDNAM          72  (36)
  6-000001B0  I*2  HYPHEN           4  (2)
 10-00000000  I*2  INBUF          166  (83)
  6-000000C8  I*2  LANHYP           6  (3)
  3-00000000  L*1  LINE           133  (133)
  6-0000013A  I*2  LITTAB          18  (9)
  6-0000015A  I*2  MACTAB          16  (8)
 10-000000AA  I*2  MARBUF         240  (120)
  9-000005C0  I*2  MRBASE         162  (81)
  9-00000704  I*2  MRINCR         162  (81)
  9-00000336  I*2  MVALUE         162  (81)
  3-0000010A  L*1  NAME            32  (32)
  7-00000000  I*2  NEGSGN           4  (2)
  3-0000012A  L*1  NUMSTR         133  (133)
  6-000001DA  I*2  OASIGN           4  (2)
  6-0000016A  I*2  OFFSET          20  (10)
  6-000001A2  I*2  ONESHF           6  (3)
  6-0000010E  I*2  OPAREN           4  (2)
  9-000002CE  I*2  OSBNAM          32  (16)
  9-000002EE  I*2  OTGNAM          32  (16)
  9-0000030E  I*2  OUNTYP          32  (16)
  6-0000019A  I*2  PCTSEM           8  (4)
  3-00000085  L*1  PREFIX         133  (133)
  9-00000052  I*2  PRENAM          32  (16)
  6-000000D4  I*2  RANHYP           6  (3)
  9-0000021A  I*2  RSTLIN         180  (90)
  6-00000154  I*2  SEMSPC           6  (3)
  6-000000FE  I*2  SPCSTG           4  (2)
  6-000001A8  I*2  SPHYSP           8  (4)
AP-00000004@  I*2  STGONE          **  (*)
AP-00000008@  I*2  STGTWO          **  (*)
  9-00000092  I*2  STRSTG          32  (16)
  6-00000072  I*2  SUFDEF           8  (4)
  9-00000072  I*2  SUFNAM          32  (16)
  6-0000014C  I*2  TABEQS           8  (4)
  6-000000CE  I*2  TABLAN           6  (3)
  6-000001CA  I*2  TABOPR           6  (3)
  6-000001C0  I*2  TABPRN          10  (5)
  6-000000AC  I*2  TABRAN           6  (3)
  6-0000008C  I*2  TABSTG           4  (2)
  9-00000100  I*2  TAGNAM          32  (16)
  9-0000047A  I*2  TMPVAL         162  (81)
  9-00000000  I*2  TOKSTG          80  (40)
  6-00000238  I*2  UNDVLD          18  (9)
  6-0000007A  I*2  UNITYP           4  (2)
  6-00000192  I*2  ZEROSG           4  (2)
  6-000000A2  I*2  ZRLAHY          10  (5)
```

LABELS

Address	Label	Address	Label
0-00000048	10	**	1000'

```
0001
```

```
0002              SUBROUTINE MOVSTG (SRCSTG, DSTSTG)
0003
0004      C       MOVES ONE STRING INTO ANOTHER LOCATION. THE FIRST
0005      C       ARGUMENT IS THE SOURCE STRING ADDRESS, THE SECOND ARGUMENT
0006      C       THE DESTINATION STRING ADDRESS.
0007
0008      C       THE NUMBER OF LOCATIONS MOVED IS THE COUNT STORED IN THE
0009      C       FIRST LOCATION OF THE SOURCE STRING PLUS 1
0010
0011              INTEGER SRCSTG(*), DSTSTG(*)
0012
0013              DO 10 I = 1, SRCSTG (1) + 1
0014              DSTSTG (I) = SRCSTG (I)
0015      10      CONTINUE
0016              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	71	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	44	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	115	

ENTRY POINTS

Address	Type	Name
0-00000000		MOVSTG

VARIABLES

Address	Type	Name
2-00000000	I*2	I

ARRAYS

Address	Type	Name	Bytes	Dimensions
AP-00000008@	I*2	DSTSTG	**	(*)
AP-00000004@	I*2	SRCSTG	**	(*)

LABELS

Address	Label
**	10

```
0001     C        REVISION HISTORY:
0002     C                22-03-77        CP      INITIALIZE TMP FILE CONTEXT.
0003     C                                        CHANGE INITIALIZATION OF CONTEXT
0004     C                                        ARRAY SO THAT THE FIFTH FIELD IS
0005     C                                        A NEGATIVE ONE IF NO MARK HAS BEEN
0006     C                                        SET FOR THIS CONTEXT POSITION.
0007     C                                        VARIABLES.
0008     C
0009     C                20-04-77        TC      CHANGE INIT. OF CONTEXT ARRAY
0010     C                                        SO THAT THE NINTH (RATHER
0011     C                                        THAN THE FIFTH) FIELD IS -1 IF NO
0012     C                                        MARK HAS BEEN SET FOR THIS CONTEXT
0013     C                                        POSITION.
0014
0015              SUBROUTINE INISTR
0016
0017     C        INITIALIZES VARIABLES FOR A NEW STRUCTURE DECLARATION.
0018
0019              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0121
0122     C        INITIALIZE TMP FILE CONTEXT VALUES.
0123
0124              TMPIN = .FALSE.
0125              TMPOUT = .FALSE.
0126
0127     C        INITIALIZE EACH CONTEXT FIELD.
0128
0129              BLFOFS = 0
0130              SOFSET = 0
0131              FOFSET = 0
0132              BOFSET = 0
0133              LFDSIZ = 0
0134              LSBSIZ = 0
0135
0136     C        INITIALIZE THE SAVED CONTEXT ARRAY.
0137
0138              DO 10 I = 1,10
0139              CONTEX (9, I) = -1
0140     10       CONTINUE
0141
0142     C        INITIALIZE THE MAXIMUM VALUES TO ZERO
0143
0144              DO 20 I = 1,8
0145              CONTEX (I, 11) = 0
0146     20       CONTINUE
0147
0148     C        INITIALIZE THE FIELD NAME AND TAG NAME
0149
0150              FLDNAM (1) = 0
0151              TAGNAM (1) = 3
0152              TAGNAM (2) = '$'
0153              TAGNAM (4) = '_'
0154
0155     C        INITIALIZE LINE TYPE VARIABLES
0156
0157              LASLIN = 0
0158              FLDLAS = .FALSE.
```

```
0159
0160              RETURN
0161              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	128	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	4	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4031	

ENTRY POINTS

Address	Type	Name
0-00000000		INISTR

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)

6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-00C0010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)

```
  6-00000154   I*2  SEMSPC                6  (3)
  6-000000FE   I*2  SPCSTG                4  (2)
  6-000001A8   I*2  SPHYSP                8  (4)
  9-00000092   I*2  STRSTG               32  (16)
  6-00000072   I*2  SUFDEF                8  (4)
  9-00000072   I*2  SUFNAM               32  (16)
  6-0000014C   I*2  TABEQS                8  (4)
  6-000000CE   I*2  TABLAN                6  (3)
  6-000001CA   I*2  TABOPR                6  (3)
  6-000001C0   I*2  TABPRN               10  (5)
  6-000000AC   I*2  TABRAN                6  (3)
  6-0000008C   I*2  TABSTG                4  (2)
  9-00000100   I*2  TAGNAM               32  (16)
  9-0000047A   I*2  TMPVAL              162  (81)
  9-00000000   I*2  TOKSTG               80  (40)
  6-00000238   I*2  UNDVLD               18  (9)
  6-0000007A   I*2  UNITYP                4  (2)
  6-00000192   I*2  ZEROSG                4  (2)
  6-000000A2   I*2  ZRLAHY               10  (5)

LABELS

    Address   Label        Address   Label

      **      10             **      20
```

```
0001              SUBROUTINE INIFLD
0002
0003        C     INITIALIZES THE ARGUMENT DEFAULTS FOR FIELD AND SUBFIELD
0004        C     DEFINITIONS.
0005
0006              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0108
0109              UNITYP (2) = 'L'
0110              TAGNAM (3) = 'L'
0111              FLDNAM (1) = 0
0112              UNISIZ = 4
0113              FSIZ = 1
0114              BLBITS = 32
0115              FSIGN = 0
0116              ASIGN (1) = 1
0117              ASIGN (2) = '0'
0118              RETURN
0119              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	65	PIC CON REL LCL SHR EXE RD NOWRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3964	

ENTRY POINTS

Address	Type	Name
0-00000000		INIFLD

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)

```
  9-000003D8  I*2  BVALUE          162  (81)
  6-000000EA  I*2  BYTSIZ           20  (10)
  6-000001B4  I*2  COMGBL           12  (6)
  6-000000C4  I*2  COMMAS            4  (2)
  6-00000112  I*2  CONBAS           20  (10)
  6-00000126  I*2  CONINC           20  (10)
  9-0000012C  I*2  CONPRE           32  (16)
  9-0000014C  I*2  CONTAG           32  (16)
  9-000007A6  I*2  CONTEX          198  (9, 11)
  6-000001D6  I*2  CPAREN            4  (2)
  6-000001D0  I*2  CPRCOM            6  (3)
  9-00000170  I*2  CVALUE          162  (81)
  6-0000004C  I*2  DEFEND           20  (10)
  6-00000022  I*2  DEFINI           20  (10)
  6-000001DE  I*2  DOLBIT           26  (13)
  6-000001F8  I*2  DOLBYT           28  (14)
  6-00000036  I*2  DOLDEF           12  (6)
  6-00000214  I*2  DOLFLD           24  (12)
  6-00000016  I*2  DOLGBL           12  (6)
  6-00000234  I*2  DOLLAR            4  (2)
  6-00000090  I*2  DOLVLD           18  (9)
  6-000000DE  I*2  DOTBLK           12  (6)
  6-00000042  I*2  DOTEQS           10  (5)
  6-00000000  I*2  DOTMAC           22  (11)
  6-00000060  I*2  ENDMAC           18  (9)
  6-000000B2  I*2  EQULST           18  (9)
  6-00000102  I*2  EQUTAB           12  (6)
  6-0000007E  I*2  EXCLSP           14  (7)
  6-00000230  I*2  EXPCLO            4  (2)
  6-0000022C  I*2  EXPOPN            4  (2)
  9-000000B8  I*2  FLDNAM           72  (36)
  6-000001B0  I*2  HYPHEN            4  (2)
 10-00000000  I*2  INBUF           166  (83)
  6-000000C8  I*2  LANHYP            6  (3)
  3-00000000  L*1  LINE            133  (133)
  6-0000013A  I*2  LITTAB           18  (9)
  6-0000015A  I*2  MACTAB           16  (8)
 10-000000AA  I*2  MARBUF          240  (120)
  9-000005C0  I*2  MRBASE          162  (81)
  9-00000704  I*2  MRINCR          162  (81)
  9-00000336  I*2  MVALUE          162  (81)
  3-0000010A  L*1  NAME             32  (32)
  7-00000000  I*2  NEGSGN            4  (2)
  3-0000012A  L*1  NUMSTR          133  (133)
  6-000001DA  I*2  OASIGN            4  (2)
  6-0000016A  I*2  OFFSET           20  (10)
  6-000001A2  I*2  ONESHF            6  (3)
  6-0000010E  I*2  OPAREN            4  (2)
  9-000002CE  I*2  OSBNAM           32  (16)
  9-000002EE  I*2  OTGNAM           32  (16)
  9-0000030E  I*2  OUNTYP           32  (16)
  6-0000019A  I*2  PCTSEM            8  (4)
  3-00000085  L*1  PREFIX          133  (133)
  9-00000052  I*2  PRENAM           32  (16)
  6-000000D4  I*2  RANHYP            6  (3)
  9-0000021A  I*2  RSTLIN          180  (90)
  6-00000154  I*2  SEMSPC            6  (3)
```

6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

```
0001              SUBROUTINE SAVSBA
0002
0003        C     SAVES SUBFIELD NAME, TAGNAME, UNIT TYPE, AND UNIT SIZE
0004        C     SO THAT THE SUBFIELD DEFINITION CAN BE OUTPUT
0005        C     PARTWAY THROUGH THE PROCESSING OF THE NEXT SUBFIELD.
0006
0007              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0109
0110              DO 10 I = 1, FLDNAM (1) + 1
0111              OSBNAM (I) = FLDNAM (I)
0112        10    CONTINUE
0113
0114              DO 20 I = 1, TAGNAM (1) + 1
0115              OTGNAM (I) = TAGNAM (I)
0116        20    CONTINUE
0117
0118              DO 30 I = 1, UNITYP (1) + 1
0119              OUNTYP (I) = UNITYP (I)
0120        30    CONTINUE
0121
0122              OFSIZ = FSIZ
0123              OUNSIZ = UNISIZ
0124
0125              OASIGN (1) = ASIGN (1)
0126              OASIGN (2) = ASIGN (2)
0127
0128              OBBITS = BLBITS
0129
0130              RETURN
0131              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	157	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	4	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4060	

ENTRY POINTS

Address	Type	Name
0-00000000		SAVSBA

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)

```
  6-0000017E  I*2  BLSSIZ          20  (10)
  9-000003D8  I*2  BVALUE         162  (81)
  6-000000EA  I*2  BYTSIZ          20  (10)
  6-000001B4  I*2  COMGBL          12  (6)
  6-000000C4  I*2  COMMAS           4  (2)
  6-00000112  I*2  CONBAS          20  (10)
  6-00000126  I*2  CONINC          20  (10)
  9-0000012C  I*2  CONPRE          32  (16)
  9-0000014C  I*2  CONTAG          32  (16)
  9-000007A6  I*2  CONTEX         198  (9, 11)
  6-000001D6  I*2  CPAREN           4  (2)
  6-000001D0  I*2  CPRCOM           6  (3)
  9-00000170  I*2  CVALUE         162  (81)
  6-0000004C  I*2  DEFEND          20  (10)
  6-00000022  I*2  DEFINI          20  (10)
  6-000001DE  I*2  DOLBIT          26  (13)
  6-000001F8  I*2  DOLBYT          28  (14)
  6-00000036  I*2  DOLDEF          12  (6)
  6-00000214  I*2  DOLFLD          24  (12)
  6-00000016  I*2  DOLGBL          12  (6)
  6-00000234  I*2  DOLLAR           4  (2)
  6-00000090  I*2  DOLVLD          18  (9)
  6-000000DE  I*2  DOTBLK          12  (6)
  6-00000042  I*2  DOTEQS          10  (5)
  6-00000000  I*2  DOTMAC          22  (11)
  6-00000060  I*2  ENDMAC          18  (9)
  6-000000B2  I*2  EQULST          18  (9)
  6-00000102  I*2  EQUTAB          12  (6)
  6-0000007E  I*2  EXCLSP          14  (7)
  6-00000230  I*2  EXPCLO           4  (2)
  6-0000022C  I*2  EXPOPN           4  (2)
  9-000000B8  I*2  FLDNAM          72  (36)
  6-000001B0  I*2  HYPHEN           4  (2)
 10-00000000  I*2  INBUF          166  (83)
  6-000000C8  I*2  LANHYP           6  (3)
  3-00000000  L*1  LINE           133  (133)
  6-0000013A  I*2  LITTAB          18  (9)
  6-0000015A  I*2  MACTAB          16  (8)
 10-000000AA  I*2  MARBUF         240  (120)
  9-000005C0  I*2  MRBASE         162  (81)
  9-00000704  I*2  MRINCR         162  (81)
  9-00000336  I*2  MVALUE         162  (81)
  3-0000010A  L*1  NAME            32  (32)
  7-00000000  I*2  NEGSGN           4  (2)
  3-0000012A  L*1  NUMSTR         133  (133)
  6-000001DA  I*2  OASIGN           4  (2)
  6-0000016A  I*2  OFFSET          20  (10)
  6-000001A2  I*2  ONESHF           6  (3)
  6-0000010E  I*2  OPAREN           4  (2)
  9-000002CE  I*2  OSBNAM          32  (16)
  9-000002EE  I*2  OTGNAM          32  (16)
  9-0000030E  I*2  OUNTYP          32  (16)
  6-0000019A  I*2  PCTSEM           8  (4)
  3-00000085  L*1  PREFIX         133  (133)
  9-00000052  I*2  PRENAM          32  (16)
  6-000000D4  I*2  RANHYP           6  (3)
  9-0000021A  I*2  RSTLIN         180  (90)
```

```
  6-00000154   I*2  SEMSPC                6  (3)
  6-000000FE   I*2  SPCSTG                4  (2)
  6-000001A8   I*2  SPHYSP                8  (4)
  9-00000092   I*2  STRSTG               32  (16)
  6-00000072   I*2  SUFDEF                8  (4)
  9-00000072   I*2  SUFNAM               32  (16)
  6-0000014C   I*2  TABEQS                8  (4)
  6-000000CE   I*2  TABLAN                6  (3)
  6-000001CA   I*2  TABOPR                6  (3)
  6-000001C0   I*2  TABPRN               10  (5)
  6-000000F    I*2  TABRAN                6  (3)
  6-0000006    I*2  TABSTG                4  (2)
  9-00000100   I*2  TAGNAM               32  (16)
  9-0000047A   I*2  TMPVAL              162  (81)
  9-00000000   I*2  TOKSTG               80  (40)
  6-00000238   I*2  UNDVLD               18  (9)
  6-0000007A   I*2  UNITYP                4  (2)
  6-00000192   I*2  ZEROSG                4  (2)
  6-000000A2   I*2  ZRLAHY               10  (5)

LABELS

    Address   Label       Address   Label       Address   Label

      **      10            **      20            **      30
```

```
0001              SUBROUTINE CHKALC
0002
0003      C       CHECKS TO SEE WHETHER THE TOTAL ALLOCATION OF
0004      C       BYTES IN THE MARS OUTPUT FILE IS EQUAL TO THE ACTUAL
0005      C       FIELD OFFSET. THIS DISCREPANCY OCCURS WHEN A SET OF
0006      C       SUBFIELDS DOES NOT TOTAL THE AMOUNT OF SPACE PERMITTED
0007      C       BY THE SURROUNDING FIELD.
0008
0009              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0111
0112              INTEGER LOCAL
0113
0114      C       IF (DEBUG) TYPE 500, BLFOFS, FOFSET, SOFSET, LSBSIZ
0115      500     FORMAT (' BLFOFS ',I3,' FOFSET ',I3,' SOFSET ',I3,' LSBSIZ ',I3)
0116              IF (BLFOFS .EQ. FOFSET) GOTO 30
0117              IF ((LASLIN .NE. SBFLD) .OR.
0118             1       (LSBSIZ .LE. 0)) GOTO 20
0119              CALL OUTBLK (LSBSIZ)
0120      20      LOCAL = FOFSET - BLFOFS
0121              IF (LOCAL .GT. 0) CALL OUTBLK (LOCAL)
0122      30      RETURN
0123              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	65	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	20	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3984	

ENTRY POINTS

Address	Type	Name
0-00000000		CHKALC

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	2-00000000	I*2	LOCAL	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	.AB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)

```
  6-0000017E  I*2  BLSSIZ          20  (10)
  9-000003D8  I*2  BVALUE         162  (81)
  6-000000EA  I*2  BYTSIZ          20  (10)
  6-000001B4  I*2  COMGBL          12  (6)
  6-000000C4  I*2  COMMAS           4  (2)
  6-00000112  I*2  CONBAS          20  (10)
  6-00000126  I*2  CONINC          20  (10)
  9-0000012C  I*2  CONPRE          32  (16)
  9-0000014C  I*2  CUNTAG          32  (16)
  9-000007A6  I*2  CONTEX         198  (9, 11)
  6-000001D6  I*2  CPAREN           4  (2)
  6-000001D0  I*2  CPRCOM           6  (3)
  9-00000170  I*2  CVALUE         162  (81)
  6-0000004C  I*2  DEFEND          20  (10)
  6-00000022  I*2  DEFINI          20  (10)
  6-000001DE  I*2  DOLBIT          26  (13)
  6-000001F8  I*2  DOLBYT          28  (14)
  6-00000036  I*2  DOLDEF          12  (6)
  6-00000214  I*2  DOLFLD          24  (12)
  6-00000016  I*2  DOLGBL          12  (6)
  6-00000234  I*2  DOLLAR           4  (2)
  6-00000090  I*2  DOLVLD          18  (9)
  6-000000DE  I*2  DOTBLK          12  (6)
  6-00000042  I*2  DOTEQS          10  (5)
  6-00000000  I*2  DOTMAC          22  (11)
  6-00000060  I*2  ENDMAC          18  (9)
  6-000000B2  I*2  EQULST          18  (9)
  6-00000102  I*2  EQUTAB          12  (6)
  6-0000007E  I*2  EXCLSP          14  (7)
  6-00000230  I*2  EXPCLO           4  (2)
  6-0000022C  I*2  EXPOPN           4  (2)
  9-000000B8  I*2  FLDNAM          72  (36)
  6-000001B0  I*2  HYPHEN           4  (2)
 10-00000000  I*2  INBUF          166  (83)
  6-000000C8  I*2  LANHYP           6  (3)
  3-00000000  L*1  LINE           133  (133)
  6-0000013A  I*2  LITTAB          18  (9)
  6-0000015A  I*2  MACTAB          16  (8)
 10-000000AA  I*2  MARBUF         240  (120)
  9-000005C0  I*2  MRBASE         162  (81)
  9-00000704  I*2  MRINCR         162  (81)
  9-00000336  I*2  MVALUE         162  (81)
  3-0000010A  L*1  NAME            32  (32)
  7-00000000  I*2  NEGSGN           4  (2)
  3-0000012A  L*1  NUMSTR         133  (133)
  6-000001DA  I*2  OASIGN           4  (2)
  6-0000016A  I*2  OFFSET          20  (10)
  6-000001A2  I*2  ONESHF           6  (3)
  6-0000010E  I*2  OPAREN           4  (2)
  9-000002CE  I*2  OSBNAM          32  (16)
  9-000002EE  I*2  OTGNAM          32  (16)
  9-0000030E  I*2  OUNTYP          32  (16)
  6-0000019A  I*2  PCTSEM           8  (4)
  3-00000085  L*1  PREFIX         133  (133)
  9-00000052  I*2  PRENAM          32  (16)
  6-000000D4  I*2  RANHYP           6  (3)
  9-0000021A  I*2  RSTLIN         180  (90)
```

```
  6-00000154  I*2  SEMSPC                6  (3)
  6-000000FE  I*2  SPCSTG                4  (2)
  6-000001A8  I*2  SPHYSP                8  (4)
  9-00000092  I*2  STRSTG               32  (16)
  6-00000072  I*2  SUFDEF                8  (4)
  9-00000072  I*2  SUFNAM               32  (16)
  6-0000014C  I*2  TABEQS                8  (4)
  6-000000CE  I*2  TABLAN                6  (3)
  6-000001CA  I*2  TABOPR                6  (3)
  6-000001C0  I*2  TABPRN               10  (5)
  6-000000AC  I*2  TABRAN                6  (3)
  6-0000008C  I*2  TABSTG                4  (2)
  9-00000100  I*2  TAGNAM               32  (16)
  9-0000047A  I*2  TMPVAL              162  (81)
  9-00000000  I*2  TOKSTG               80  (40)
  6-00000238  I*2  UNDVLD               18  (9)
  6-0000007A  I*2  UNITYP                4  (2)
  6-00000192  I*2  ZEROSG                4  (2)
  6-000000A2  I*2  ZRLAHY               10  (5)

LABELS

    Address   Label       Address   Label       Address   Label

  0-0000002D  20        0-00000040  30            **      500'

FUNCTIONS AND SUBROUTINES REFERENCED

  Type  Name

        OUTBLK
```

```
0001              SUBROUTINE GETREM (PTR)
0002
0003      C       COLLECTS THE REST OF AN INPUT LINE AFTER THE DEFINITION
0004      C       COMPONENTS AND SAVES IT IN AN AUXILIARY BUFFER.
0005
0006              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0108
0109              INTEGER PTR, LOCAL
0110
0111      C       IF (DEBUG) TYPE 500, (INBUF (I), I = PTR + 1, INBUF (PTR) + PTR)
0112      500     FORMAT (' ',90A1)
0113      C       IF (DEBUG) TYPE 510, PTR, INBUF (PTR)
0114      510     FORMAT (' POINTER IS ',I3,', COUNT IS ',I3)
0115              DO 10 I = PTR, INBUF (PTR) + PTR
0116              LOCAL = I - PTR + 1
0117              RSTLIN (LOCAL) = INBUF (I)
0118      10      CONTINUE
0119              RETURN
0120              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	74	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	4	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3977	

ENTRY POINTS

Address	Type	Name
0-00000000		GETREM

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000002	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	2-00000000	I*2	LOCAL
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM
9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF
AP-0000004A	I*2	PTR	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEOL
5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN
5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)

```
  6-0000017E   I*2  BLSSIZ              20  (10)
  9-000003D8   I*2  BVALUE             162  (81)
  6-000000EA   I*2  BYTSIZ              20  (10)
  6-000001B4   I*2  COMGBL              12  (6)
  6-000000C4   I*2  COMMAS               4  (2)
  6-00000112   I*2  CONBAS              20  (10)
  6-00000126   I*2  CONINC              20  (10)
  9-0000012C   I*2  CONPRE              32  (16)
  9-0000014C   I*2  CONTAG              32  (16)
  9-000007A6   I*2  CONTEX             198  (9, 11)
  6-000001D6   I*2  CPAREN               4  (2)
  6-000001D0   I*2  CPRCOM               6  (3)
  9-00000170   I*2  CVALUE             162  (81)
  6-0000004C   I*2  DEFEND              20  (10)
  6-00000022   I*2  DEFINI              20  (10)
  6-000001DE   I*2  DOLBIT              26  (13)
  6-000001F8   I*2  DOLBYT              28  (14)
  6-00000036   I*2  DOLDEF              12  (6)
  6-00000214   I*2  DOLFLD              24  (12)
  6-00000016   I*2  DOLGBL              12  (6)
  6-00000234   I*2  DOLLAR               4  (2)
  6-00000090   I*2  DOLVLD              18  (9)
  6-000000DE   I*2  DOTBLK              12  (6)
  6-00000042   I*2  DOTEQS              10  (5)
  6-00000000   I*2  DOTMAC              22  (11)
  6-00000060   I*2  ENDMAC              18  (9)
  6-000000B2   I*2  EQULST              18  (9)
  6-00000102   I*2  EQUTAB              12  (6)
  6-0000007E   I*2  EXCLSP              14  (7)
  6-00000230   I*2  EXPCLO               4  (2)
  6-0000022C   I*2  EXPOPN               4  (2)
  9-000000B8   I*2  FLDNAM              72  (36)
  6-000001B0   I*2  HYPHEN               4  (2)
 10-00000000   I*2  INBUF              166  (83)
  6-000000C8   I*2  LANHYP               6  (3)
  3-00000000   L*1  LINE               133  (133)
  6-0000013A   I*2  LITTAB              18  (9)
  6-0000015A   I*2  MACTAB              16  (8)
 10-000000AA   I*2  MARBUF             240  (120)
  9-000005C0   I*2  MRBASE             162  (81)
  9-00000704   I*2  MRINCR             162  (81)
  9-00000336   I*2  MVALUE             162  (81)
  3-0000010A   L*1  NAME                32  (32)
  7-00000000   I*2  NEGSGN               4  (2)
  3-0000012A   L*1  NUMSTR             133  (133)
  6-000001DA   I*2  OASIGN               4  (2)
  6-0000016A   I*2  OFFSET              20  (10)
  6-000001A2   I*2  ONESHF               6  (3)
  6-0000010E   I*2  OPAREN               4  (2)
  9-000002CE   I*2  OSBNAM              32  (16)
  9-000002EE   I*2  OTGNAM              32  (16)
  9-0000030E   I*2  OUNTYP              32  (16)
  6-0000019A   I*2  PCTSEM               8  (4)
  3-00000085   L*1  PREFIX             133  (133)
  9-00000052   I*2  PRENAM              32  (16)
  6-000000D4   I*2  RANHYP               6  (3)
  9-0000021A   I*2  RSTLIN             180  (90)
```

```
  6-00000154   I*2  SEMSPC                6  (3)
  6-000000FE   I*2  SPCSTG                4  (2)
  6-000001A8   I*2  SPHYSP                8  (4)
  9-00000092   I*2  STRSTG               32  (16)
  6-00000072   I*2  SUFDEF                8  (4)
  9-00000072   I*2  SUFNAM               32  (16)
  6-0000014C   I*2  TABEQS                8  (4)
  6-000000CE   I*2  TABLAN                6  (3)
  6-000001CA   I*2  TABOPR                6  (3)
  6-000001C0   I*2  TABPRN               10  (5)
  6-000000AC   I*2  TABRAN                6  (3)
  6-0000008C   I*2  TABSTG                4  (2)
  9-00000100   I*2  TAGNAM               32  (16)
  9-0000047A   I*2  TMPVAL              162  (81)
  9-00000000   I*2  TOKSTG               80  (40)
  6-00000238   I*2  UNDVLD               18  (9)
  6-0000007A   I*2  UNITYP                4  (2)
  6-0C000192   I*2  ZEROSG                4  (2)
  6-000000A2   I*2  ZRLAHY               10  (5)

LABELS

    Address   Label        Address   Label        Address   Label

      **      10             **      500'           **      510'
```

```
0001            SUBROUTINE EXCCMT (BUF, PTR)
0002
0003    C       EXCHANGES SEMI COLONS IN A LINE FOR EXCLAMATION POINTS.
0004
0005            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0107
0108            INTEGER BUF(*), PTR, LOCAL
0109
0110            LOCAL = BUF (PTR) + 1
0111    C       IF (DEBUG) TYPE 100, LOCAL
0112    100     FORMAT (' END OF LOOP COUNT IS ',I3)
0113            DO 10 I = PTR + 1, BUF (PTR) + PTR
0114            IF (BUF (I) .NE. ';') GOTO 10
0115            BUF (I) = '!'
0116    10      CONTINUE
0117            RETURN
0118            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	76	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	24	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3999	

ENTRY POINTS

Address	Type	Name
0-00000000		EXCCMT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000002	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	2-00000000	I*2	LOCAL
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM
9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF
AP-00000008	I*2	PTR	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL
5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN
5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)

6-0000017E	I*2	BLSSIZ	20	(10)
AP-00000004@	I*2	BUF	**	(*)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label
0-00000041	10	**	100'

```
0001    C       REVISION HISTORY:
0002    C               29-06-77        TC      REPLACED THREE CALLS ON CHKMAK
0003    C                                       AND ONE CALL ON MOVSTG WITH A
0004    C                                       CALL ON ETOMAR. (2.4)
0005
0006            SUBROUTINE CVTEXP (INPVAL, BLIDUM, MARDUM)
0007
0008    C       CONVERTS AN EXPRESSION FOUND AT INPVAL INTO A BLISS
0009    C       AND A MARS EXPRESSION. THE BLISS EXPRESSION IS SAVED
0010    C       AT BLIDUM. THE MARS EXPRESSION IS SAVED AT MARDUM.
0011
0012            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0114
0115            INTEGER INPVAL (*), BLIDUM (*), MARDUM (*)
0116            CALL MOVSTG (INPVAL, TMPVAL)
0117            CALL ETOBLS (TMPVAL, BLIDUM)
0118            IF (BLIDUM (BLIDUM (1) + 1) .EQ. '-')
0119           1       BLIDUM (1) = BLIDUM (1) - 1
0120    C       IF (DEBUG) TYPE 500, (BLIDUM (I), I = 2, BLIDUM (1) + 1)
0121    C       IF (DEBUG) TYPE 500, (INPVAL (I), I = 2, INPVAL (1) + 1)
0122    500     FORMAT (' ',90A1)
0123            CALL ETOMAR(INPVAL,MARDUM)
0124    C       IF (DEBUG) TYPE 500, (MARDUM (I), I = 2, MARDUM (1) + 1)
0125            RETURN
0126            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	107	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	96	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4102	

ENTRY POINTS

Address	Type	Name
0-00000000		CVTEXP

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-000C000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-0000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
AP-00000008@	I*2	BLIDUM	**	(*)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)

6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
AP-0000004@	I*2	INPVAL	**	(*)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
AP-0000000C@	I*2	MARDUM	**	(*)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label
**	500'

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name
	ETOBLS		ETOMAR		MOVSTG

```
0001    C       Version V02-001
0002    C
0003    C*****************************************************************************
0004    C*                                                                           *
0005    C*  COPYRIGHT (c) 1980                                                       *
0006    C*  BY DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASS.                         *
0007    C*                                                                           *
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0021    C*                                                                           *
0022    C*****************************************************************************
0023    C
0024    C       UTILITIES FOR MDL
0025    C
0026    C       REVISION HISTORY:
0027    C               22-03-77        CP      CHANGE GETLIN TO ACCEPT INPUT LINES
0028    C                                       FROM THE INPUT FILE OR FROM THE TMP
0029    C                                       FILE, DEPENDING UPON THE SETTING OF
0030    C                                       THE FLAG TMPIN.
0031
0032            SUBROUTINE GETLIN
0033            INCLUDE 'SRC$:MDL32CMN.CMN'
0135            EQUIVALENCE (INCNT,INBUF(1))
0136    C       READS A LINE OF INPUT FILE - SETS ENDFILE IF EOF, COUNTS LINES
0137    C
0138            IF (TMPIN) GOTO 300
0139            INPLIN = INPLIN+1
0140            READ(INP,200,END=99,ERR=99) (INBUF(I),I=2,81)
0141    200     FORMAT(80A1)
0142            INCNT = 80
0143            DO 20 I=1,80
0144            IF(INBUF(82-I).NE.BLANK) GOTO 21
0145            INCNT = INCNT-1
0146    20      CONTINUE
0147    21      INCNT = INCNT+1
0148            INBUF(INCNT+2) = EOLCH
0149            INPTR = 2
0150            RETURN
0151    99      CONTINUE
0152    C       IF (DEBUG) TYPE 1000
0153    1000    FORMAT (' END OF FILE')
0154            ENDFIL = .TRUE.
0155            RETURN
0156
0157    C       WE READ THE SIZE INTO THE TEMPORARY I2 AND THEN MOVE
0158    C       IT INTO INBUF(1) BECAUSE OF A BUG IN THE FORTRAN-10
```

```
0159     C        OPTIMIZER.
0160     C
0161     300      READ (TMP, END=399, ERR=399) I2,
0162              1       (INBUF (I), I = 2, I2 + 1)
0163              INBUF (1) = I2
0164              INPTR = 2
0165              INBUF(INCNT+2) = EOLCH
0166              RETURN
0167
0168     399      ENDFIL = .TRUE.
0169              RETURN
0170
0171              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	286	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	5	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	16	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4206	

ENTRY POINTS

Address	Type	Name
0-00000000		GETLIN

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
2-00000002	I*2	I2	10-00000000	I*2	INCNT	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN
10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN
9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR
10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ
5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEOL
5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN
5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0C000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-000001?0	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

```
  9-0000021A  I*2  RSTLIN              180  (90)
  6-00000154  I*2  SEMSPC                6  (3)
  6-000000FE  I*2  SPCSTG                4  (2)
  6-000001A8  I*2  SPHYSP                8  (4)
  9-00000092  I*2  STRSTG               32  (16)
  6-00000072  I*2  SUFDEF                8  (4)
  9-00000072  I*2  SUFNAM               32  (16)
  6-0000014C  I*2  TABEQS                8  (4)
  6-00000CCE  I*2  TABLAN                6  (3)
  6-000001CA  I*2  TABOPR                6  (3)
  6-000001C0  I*2  TABPRN               10  (5)
  6-000000AC  I*2  TABRAN                6  (3)
  6-0000008C  I*2  TABSTG                4  (2)
  9-00000100  I*2  TAGNAM               32  (16)
  9-0000047A  I*2  TMPVAL              162  (81)
  9-00000000  I*2  TOKSTG               80  (40)
  6-00000238  I*2  UNDVLD               18  (9)
  6-0000007A  I*2  UNITYP                4  (2)
  6-00000192  I*2  ZEROSG                4  (2)
  6-000000A2  I*2  ZRLAHY               10  (5)
```

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	20	0-00000086	21	0-000000A7	99	1-00000000	200'	0-000000AF	300	0-00000116	399
**	1000'										

```
0001    C       REVISION HISTORY:
0002    C               22-03-77        CP      ADD PLUS AND MINUS AS TOKEN TYPES.
0003
0004            SUBROUTINE GETTOK
0005    C
0006    C       RETURNS A TOKEN - AND IDENTIFIES IT IN TOKTYP
0007    C
0008            INCLUDE 'SRC$:MDL32CMN.CMN'
0110            INTEGER TERM(7),TTYP(7)
0111            EQUIVALENCE (TC,TOKSTG(1))
0112            DATA TERM/'.',' ',',',0,'<','>','+','-'/
0113            DATA NTERM,TTYP/7,SEMI,COMMA,EOL,LANGLE,RANGLE,PLUS,MINUS/
0114    C
0115    C
0116    C       SKIP LEADING BLANKS OR TABS
0117    C
0118            K = INPTR
0119            L = INBUF(1) + 1
0120            IF (K .GT. L) GO TO 12
0121            DO 10 INPTR=K,L
0122            IF((INBUF(INPTR).NE.BLANK).AND.(INBUF(INPTR).NE.TAB)) GOTO 12
0123    10      CONTINUE
0124    C
0125    C       LINE WAS EMPTY
0126    C
0127    12      TC = 0
0128            TP = 2
0129    15      CHAR = INBUF(INPTR)
0130            TOKSTG(TP) = CHAR
0131            TC = TC+1
0132            TP = TP+1
0133            INPTR = INPTR+1
0134    C CHECK FOR TERMINATORS
0135            DO 20 I=1,NTERM
0136    20      IF(TERM(I).EQ.CHAR) GOTO 50
0137            DO 22 I=1,NTERM
0138    22      IF (TERM(I).EQ.INBUF(INPTR)) GOTO 30
0139            IF((INBUF(INPTR).NE.BLANK).AND.(INBUF(INPTR).NE.TAB)) GOTO 15
0140    C
0141    C       FINISHED , CLASSIFY STRING
0142    C
0143    30      IF((TOKSTG(2).GE.'A').AND.(TOKSTG(2).LE.'Z')) TOKTYP = ALPHA
0144            IF((TOKSTG(2).EQ.'$').OR.(TOKSTG(2).EQ.'_')) TOKTYP = ALPHA
0145            IF((TOKSTG(2).GE.'0').AND.(TOKSTG(2).LE.'9')) TOKTYP = NUMBER
0146            RETURN
0147    50      TOKTYP = TTYP(I)
0148            RETURN
0149            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	321	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	40	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4260	

ENTRY POINTS

Address	Type	Name
0-00000000		GETTOK

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	2-00000024	I*2	CHAR	9-0000016E	I*2	CINCR	4-00000004	I*2	COL
5-0C000016	L*2	CONEXP	8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL
11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT
5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ
2-00000026	I*2	I	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR
2-0000001E	I*2	K	2-00000020	I*2	L	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	2-0000001C	I*2	NTERM	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEOL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
9-00000000	I*2	TC	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT
9-00000050	I*2	TOKTYP	2-00000022	I*2	TP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
2-00000000	I*2	TERM	14	(7)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
2-0000000E	I*2	TTYP	14	(7)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHV	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	10	0-00000054	12	0-0000005E	15	**	20	**	22	0-000000EF	30
0-00000133	50										

```
0001              INTEGER FUNCTION INTVAL(S)
0002        C
0003        C RETURNS THE DECIMAL INTEGER VALUE OF A STRING
0004        C
0005              IMPLICIT INTEGER(A-Z)
0006              INTEGER S(*)
0007              INTEGER NUM(10)
0008              DATA NUM/'0','1','2','3','4','5','6','7','8','9'/
0009        C
0010              X = 0
0011              DO 10 I = 1,S(1)
0012              C = S(I+1)
0013        C TO BE INDEPENDENT OF SYSTEM COMPARE CHARS
0014              DO 20 N=1,10
0015        20    IF(C.EQ.NUM(N))GOTO 30
0016        C ILLEGAL CHAR
0017              INTVAL = -1
0018              RETURN
0019        C
0020        30    X = 10*X + (N-1)
0021        10    CONTINUE
0022              INTVAL = X
0023              RETURN
0024              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	110	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	54	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	164	

ENTRY POINTS

Address	Type	Name
0-00000000	I*4	INTVAL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
2-00000018	I*2	C	2-00000016	I*2	I	2-0000001A	I*2	N	2-00000014	I*2	X

ARRAYS

Address	Type	Name	Bytes	Dimensions
2-00000000	I*2	NUM	20	(10)
AP-00000004@	I*2	S	**	(*)

LABELS

Address	Label	Address	Label	Address	Label
**	10	**	20	0-00000052	30

```
0001              SUBROUTINE GETEXP(P)
0002      C
0003      C       PTR -> START OF AN EXPRESSION
0004      C       RETURN WITH IT POINTING TO THE LAST CHAR OF THE EXPRESSION
0005      C
0006              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0108      C
0109      C GO FORWARDS UNTIL EITHER EOL, COMMA, OR ; IS SEEN
0110      C THEN BACK UP OVER BLANKS OR TABS AND POINT TO
0111      C THE LAST NONBLANK/NONTAB
0112      C
0113              DO 10 I=P,INBUF(1)+1
0114              K = I
0115              IF((INBUF(I).EQ.';') .OR.
0116             1        (INBUF(I).EQ.',')) GOTO 20
0117      10      CONTINUE
0118      20      IF (K .EQ. P) GOTO 40
0119              K = K-1
0120              K1 = K
0121              DO 25 I=1,K1
0122              IF((INBUF(K).NE.BLANK).AND.(INBUF(K).NE.TAB)) GOTO 30
0123              K = K-1
0124      25      CONTINUE
0125      30      P = K
0126      40      RETURN
0127              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	143	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	8	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4050	

ENTRY POINTS

Address	Type	Name
0-00000000		GETEXP

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	2-00000002	I*2	K
2-00000004	I*2	K1	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN
9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR
10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ
AP-0000004A	I*2	P	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)

6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-0000023B	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	10	0-00000044	20	**	25	0-00000089	30	0-0000008E	40

00
00
00
00
01
01
01

PR

1
1
1

EN

VA

1

1
1
1

```
0001
0002            SUBROUTINE PUTMAR(CS)
0003            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0105            INTEGER CS(*)
0106    C
0107    C       PUTS COUNTED STRING INTO THE BUFFER (AT THE END)
0108    C
0109            K = MARBUF(1)
0110            L = CS(1)
0111            DO 10 I=1,L
0112    10      MARBUF(K+I+1)=CS(I+1)
0113            MARBUF(1) = K+L
0114            RETURN
0115            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	90	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	28	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4017	

ENTRY POINTS

Address	Type	Name
0-00000000		PUTMAR

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000004	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	2-00000000	I*2	K
2-00000002	I*2	L	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN

9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR
10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ
5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL
5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN
5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
AP-0000004@	I*2	CS	**	(*)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)

10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label
***	10

```
0001            SUBROUTINE PUTBLI(CS)
0002            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0104            INTEGER CS(*)
0105    C
0106    C       PUTS COUNTED STRING INTO THE BUFFER (AT THE END)
0107    C
0108            K = BLIBUF(1)
0109            L = CS(1)
0110            DO 10 I=1,L
0111    10      BLIBUF(K+I+1)=CS(I+1)
0112            BLIBUF(1) = K+L
0113            RETURN
0114            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	90	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	28	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4017	

ENTRY POINTS

Address	Type	Name
0-00000000		PUTBLI

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000004	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	2-00000000	I*2	K
2-00000002	I*2	L	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN
9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR

10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ
5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000C04	L*2	STGEQL
5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN
5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
AP-0000004@	I*2	CS	**	(*)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-C00000AA	I*2	MARBUF	240	(120)

9-000005C0	I*2	MRBASE	162	(81)	00
9-00000704	I*2	MRINCR	162	(81)	00
9-00000336	I*2	MVALUE	162	(81)	00
3-0000010A	L*1	NAME	32	(32)	00
7-00000000	I*2	NEGSGN	4	(2)	00
3-0000012A	L*1	NUMSTR	133	(133)	00
6-000001DA	I*2	OASIGN	4	(2)	00
6-0000016A	I*2	OFFSET	20	(10)	01
6-000001A2	I*2	ONESHF	6	(3)	01
6-0000010E	I*2	OPAREN	4	(2)	01
9-000002CE	I*2	OSBNAM	32	(16)	01
9-000002EE	I*2	OTGNAM	32	(16)	01
9-0000030E	I*2	OUNTYP	32	(16)	01
6-0000019A	I*2	PCTSEM	8	(4)	01
3-00000085	L*1	PREFIX	133	(133)	01
9-00000052	I*2	PRENAM	32	(16)	01
6-000000D4	I*2	RANHYP	6	(3)	01
9-0000021A	I*2	RSTLIN	180	(90)	01
6-00000154	I*2	SEMSPC	6	(3)	01
6-000000FE	I*2	SPCSTG	4	(2)	
6-000001A8	I*2	SPHYSP	8	(4)	
9-00000092	I*2	STRSTG	32	(16)	
6-00000072	I*2	SUFDEF	8	(4)	
9-00000072	I*2	SUFNAM	32	(16)	
6-0000014C	I*2	TABEQS	8	(4)	
6-000000CE	I*2	TABLAN	6	(3)	
6-000001CA	I*2	TABOPR	6	(3)	
6-000001C0	I*2	TABPRN	10	(5)	
6-000000AC	I*2	TABRAN	6	(3)	
6-0000008C	I*2	TABSTG	4	(2)	
9-00000100	I*2	TAGNAM	32	(16)	
9-0000047A	I*2	TMPVAL	162	(81)	
9-00000000	I*2	TOKSTG	80	(40)	
6-00000238	I*2	UNDVLD	18	(9)	
6-0000007A	I*2	UNITYP	4	(2)	
6-00000192	I*2	ZEROSG	4	(2)	
6-000000A2	I*2	ZRLAHY	10	(5)	

LABELS

Address	Label
**	10

```
0001              SUBROUTINE OUTBUF(CHN,BUF)
0002        C     OUTPUTS BUFFER BUF
0003              INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0105              INTEGER BUF(*)
0106        C
0107        C
0108              IF(BUF(1).GT.1) GOTO 20
0109              IF(BUF(2).NE.EOLCH) GOTO 20
0110              WRITE(CHN,101)
0111        101   FORMAT()
0112              GOTO 30
0113        20    WRITE(CHN,100) (BUF(I),I=2,BUF(1)+1)
0114        100   FORMAT(1X,120A1)
0115        30    BUF(1) = 0
0116              BUF(2) = EOLCH
0117              RETURN
0118              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	146	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	8	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	24	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4077	

ENTRY POINTS

Address	Type	Name
0-00000000		OUTBUF

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	AP-00000004	I*2	CHN	9-0000016E	I*2	CINCR	4-00000004	I*2	COL
5-00000016	L*2	CONEXP	8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL

11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT
5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ
2-00000000	I*2	I	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
9-00000218	I*2	LPTR	9-0C000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM
9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF
5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK
11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT
9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ
5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ			

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
AP-00000008@	I*2	BUF	**	(*)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-000C0000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000C0082	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)

```
  5-000000C8  I*2  LANHYP      6  (3)
  3-00000000  L*1  LINE      133  (133)
  6-0000013A  I*2  LITTAB     18  (9)
  6-0000015A  I*2  MACTAB     16  (8)
 10-000000AA  I*2  MARBUF    240  (120)
  9-000005C0  I*2  MRBASE    162  (81)
  9-00C00704  I*2  MRINCR    162  (81)
  9-00000336  I*2  MVALUE    162  (81)
  3-0000010A  L*1  NAME       32  (32)
  7-00000000  I*2  NEGSGN      4  (2)
  3-0000012A  L*1  NUMSTR    133  (133)
  6-000001DA  I*2  OASIGN      4  (2)
  6-0000016A  I*2  OFFSET     20  (10)
  6-000001A2  I*2  ONESHF      6  (3)
  6-0000010E  I*2  OPAREN      4  (2)
  9-000002CE  I*2  OSBNAM     32  (16)
  9-000002EE  I*2  OTGNAM     32  (16)
  9-0000030E  I*2  OUNTYP     32  (16)
  6-0000019A  I*2  PCTSEM      8  (4)
  3-00000085  L*1  PREFIX    133  (133)
  9-00000052  I*2  PRENAM     32  (16)
  6-000000D4  I*2  RANHYP      6  (3)
  9-0000021A  I*2  RSTLIN    180  (90)
  6-00000154  I*2  SEMSPC      6  (3)
  6-000000FE  I*2  SPCSTG      4  (2)
  6-000001A8  I*2  SPHYSP      8  (4)
  9-00000092  I*2  STRSTG     32  (16)
  6-00000072  I*2  SUFDEF      8  (4)
  9-00000072  I*2  SUFNAM     32  (16)
  6-0000014C  I*2  TABEQS      8  (4)
  6-000000CE  I*2  TABLAN      6  (3)
  6-000001CA  I*2  TABOPR      6  (3)
  6-000001C0  I*2  TABPRN     10  (5)
  6-000000AC  I*2  TABRAN      6  (3)
  6-0000008C  I*2  TABSTG      4  (2)
  9-00000100  I*2  TAGNAM     32  (16)
  9-0000047A  I*2  TMPVAL    162  (81)
  9-00000000  I*2  TOKSTG     80  (40)
  6-00000238  I*2  UNDVLD     18  (9)
  6-0000007A  I*2  UNITYP      4  (2)
  6-00000192  I*2  ZEROSG      4  (2)
  6-000000A2  I*2  ZRLAHY     10  (5)

LABELS

     Address   Label        Address   Label        Address   Label        Address   Label

   0-00000042  20         0-00000082  30         1-00000001  100'       1-00000000  101'
```

```
0001
0002     C
0003               SUBROUTINE OUTMAR
0004     C OUTPUTS THE MARS BUFFER
0005               INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0107               CALL OUTBUF(MAR,MARBUF)
0108               RETURN
0109               END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	17	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	12	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3928	

ENTRY POINTS

Address	Type	Name
0-00000000		OUTMAR

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-000001oC	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET

9-00000128 I*2 VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000C22	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBIT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)

```
  6-000001DA  I*2  OASIGN          4  (2)
  6-0000016A  I*2  OFFSET         20  (10)
  6-000001A2  I*2  ONESHF          6  (3)
  6-0000010E  I*2  OPAREN          4  (2)
  9-000002CE  I*2  OSBNAM         32  (16)
  9-000002EE  I*2  OTGNAM         32  (16)
  9-0000030E  I*2  OUNTYP         32  (16)
  6-0000019A  I*2  PCTSEM          8  (4)
  3-00000085  L*1  PREFIX        133  (133)
  9-00000052  I*2  PRENAM         32  (16)
  6-000000D4  I*2  RANHYP          6  (3)
  9-0000021A  I*2  RSTLIN        180  (90)
  6-00000154  I*2  SEMSPC          6  (3)
  6-000000FE  I*2  SPCSTG          4  (2)
  6-000001A8  I*2  SPHYSP          8  (4)
  9-00000092  I*2  STRSTG         32  (16)
  6-00000072  I*2  SUFDEF          8  (4)
  9-00000072  I*2  SUFNAM         32  (16)
  6-0000014C  I*2  TABEQS          8  (4)
  6-000000CE  I*2  TABLAN          6  (3)
  6-000001CA  I*2  TABOPR          6  (3)
  6-000001C0  I*2  TABPRN         10  (5)
  6-000000AC  I*2  TABRAN          6  (3)
  6-0000008C  I*2  TABSTG          4  (2)
  9-00000100  I*2  TAGNAM         32  (16)
  9-0000047A  I*2  TMPVAL        162  (81)
  9-00000000  I*2  TOKSTG         80  (40)
  6-00000238  I*2  UNDVLD         18  (9)
  6-0000007A  I*2  UNITYP          4  (2)
  6-00000192  I*2  ZEROSG          4  (2)
  6-000000A2  I*2  ZRLAHY         10  (5)

FUNCTIONS AND SUBROUTINES REFERENCED
  Type  Name
        OUTBUF
```

```
0001
0002            SUBROUTINE OUTBLI
0003    C OUTPUTS THE BLISS BUFFER
0004            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0106            CALL OUTBUF(BLI,BLIBUF)
0107            RETURN
0108            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	17	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	12	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3928	

ENTRY POINTS

Address	Type	Name
0-00000000		OUTBLI

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-000C016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)

6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
	OUTBUF

```
0001              INTEGER FUNCTION LASTNB(P)
0002    C
0003    C         RETURNS INDEX OF LAST NON-BLANK,NON-TAB BEFORE THE POINTER
0004    C
0005    C
0006              !NCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0108    C
0109              K = P-1
0110              DO 10 I=1,K
0111              C = INBUF(P-I+1)
0112              IF((C.NE.BLANK).AND.(C.NE.TAB)) GOTO 30
0113    10        CONTINUE
0114    30        LASTNB = P-I+1
0115              RETURN
0116              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	81	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	8	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3988	

ENTRY POINTS

Address	Type	Name
0-00000000	I*2	LASTNB

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBIT[illegible]	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
2-00000004	I*2	C	9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL
5-00000016	L*2	CONEXP	8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL
11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT
5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ
2-00000002	I*2	I	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR

2-00000000	I*2	K	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN
9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR
10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ
AP-00000004	I*2	P	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-00000000	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-00000088	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)

```
  6-0000015A  I*2  MACTAB          16  (8)
 10-000000AA  I*2  MARBUF         240  (120)
  9-000005C0  I*2  MRBASE         162  (81)
  9-00000704  I*2  MRINCR         162  (81)
  9-00000336  I*2  MVALUE         162  (81)
  3-0000010A  L*1  NAME            32  (32)
  7-00000000  I*2  NEGSGN           4  (2)
  3-0000012A  L*1  NUMSTR         133  (133)
  6-000001DA  I*2  OASIGN           4  (2)
  6-0000016A  I*2  OFFSET          20  (10)
  6-000001A2  I*2  ONESHF           6  (3)
  6-0000010E  I*2  OPAREN           4  (2)
  9-000002CE  I*2  OSBNAM          32  (16)
  9-000002EE  I*2  OTGNAM          32  (16)
  9-0000030E  I*2  OUNTYP          32  (16)
  6-0000019A  I*2  PCTSEM           8  (4)
  3-00000085  L*1  PREFIX         133  (133)
  9-00000052  I*2  PRENAM          32  (16)
  6-000000D4  I*2  RANHYP           6  (3)
  9-0000021A  I*2  RSTLIN         180  (90)
  6-00000154  I*2  SEMSPC           6  (3)
  6-000000FE  I*2  SPCSTG           4  (2)
  6-000001A8  I*2  SPHYSP           8  (4)
  9-00000092  I*2  STRSTG          32  (16)
  6-00000072  I*2  SUFDEF           8  (4)
  9-00000072  I*2  SUFNAM          32  (16)
  6-0000014C  I*2  TABEQS           8  (4)
  6-000000CE  I*2  TABLAN           6  (3)
  6-000001CA  I*2  TABOPR           6  (3)
  6-000001C0  I*2  TABPRN          10  (5)
  6-000000AC  I*2  TABRAN           6  (3)
  6-0000008C  I*2  TABSTG           4  (2)
  9-00000100  I*2  TAGNAM          32  (16)
  9-0000047A  I*2  TMPVAL         162  (81)
  9-00000000  I*2  TOKSTG          80  (40)
  6-00000238  I*2  UNDVLD          18  (9)
  6-0000007A  I*2  UNITYP           4  (2)
  6-00000192  I*2  ZEROSG           4  (2)
  6-000000A2  I*2  ZRLAHY          10  (5)

LABELS

    Address   Label        Address   Label

      **      10         0-00000048  30
```

```
0001
0002            INTEGER FUNCTION NEXTNB (P)
0003
0004    C       RETURNS THE INDEX OF THE NEXT NON-BLANK, NON-TAB
0005    C       CHARACTER AFTER THE CURRENT CHARACTER.
0006
0007            INCLUDE 'SRC$:MDL32CMN.CMN/NOLIST'
0109
0110            INTEGER C
0111
0112            DO 10 I = P + 1, INBUF (1) + 1
0113            K = I
0114            C = INBUF (I)
0115            IF ((C .NE. BLANK) .AND.
0116            1       (C .NE. TAB)) GOTO 20
0117    10      CONTINUE
0118    20      NEXTNB = K
0119            RETURN
0120            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	79	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	8	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3986	

ENTRY POINTS

Address	Type	Name
0-00000000	I*2	NEXTNB

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
2-00000000	I*2	C	9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL
5-00000016	L*2	CONEXP	8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL
11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT
5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ
2-00000002	I*2	I	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR
2-00000004	I*2	K	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN
9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR
10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ
AP-00000004@	I*2	P	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNLOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

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 9-00000662  I*2  BLINCR      162  (81)
 6-0000017E  I*2  BLSSIZ       20  (10)
 9-000003D8  I*2  BVALUE      162  (81)
 6-000000EA  I*2  BYTSIZ       20  (10)
 6-000001B4  I*2  COMGBL       12  (6)
 6-000000C4  I*2  COMMAS        4  (2)
 6-00000112  I*2  CONBAS       20  (10)
 6-00000126  I*2  CONINC       20  (10)
 9-0000012C  I*2  CONPRE       32  (16)
 9-0000014C  I*2  CONTAG       32  (16)
 9-000007A6  I*2  CONTEX      198  (9, 11)
 6-000001D6  I*2  CPAREN        4  (2)
 6-000001D0  I*2  CPRCOM        6  (3)
 9-00000170  I*2  CVALUE      162  (81)
 6-0000004C  I*2  DEFEND       20  (10)
 6-00000022  I*2  DEFINI       20  (10)
 6-000001DE  I*2  DOLBIT       26  (13)
 6-000001F8  I*2  DOLBYT       28  (14)
 6-00000036  I*2  DOLDEF       12  (6)
 6-00000214  I*2  DOLFLD       24  (12)
 6-00000016  I*2  DOLGBL       12  (6)
 6-00000234  I*2  DOLLAR        4  (2)
 6-00000090  I*2  DOLVLD       18  (9)
 6-000000DE  I*2  DOTBLK       12  (6)
 6-00000042  I*2  DOTEQS       10  (5)
 6-00000000  I*2  DOTMAC       22  (11)
 6-00000060  I*2  ENDMAC       18  (9)
 6-000000B2  I*2  EQULST       18  (9)
 6-00000102  I*2  EQUTAB       12  (6)
 6-0000007E  I*2  EXCLSP       14  (7)
 6-00000230  I*2  EXPCLO        4  (2)
 6-0000022C  I*2  EXPOPN        4  (2)
 9-000000B8  I*2  FLDNAM       72  (36)
 6-000001B0  I*2  HYPHEN        4  (2)
10-00000000  I*2  INBUF       166  (83)
 6-000000C8  I*2  LANHYP        6  (3)
 3-00000000  L*1  LINE        133  (133)
 6-0000013A  I*2  LITTAB       18  (9)
 6-0000015A  I*2  MACTAB       16  (8)
10-000000AA  I*2  MARBUF      240  (120)
 9-000005C0  I*2  MRBASE      162  (81)
 9-00000704  I*2  MRINCR      162  (81)
 9-00000336  I*2  MVALUE      162  (81)
 3-0000010A  L*1  NAME         32  (32)
 7-00000000  I*2  NEGSGN        4  (2)
 3-0000012A  L*1  NUMSTR      133  (133)
 6-000001DA  I*2  OASIGN        4  (2)
 6-0000016A  I*2  OFFSET       20  (10)
 6-000001A2  I*2  ONESHF        6  (3)
 6-0000010E  I*2  OPAREN        4  (2)
 9-000002CE  I*2  OSBNAM       32  (16)
 9-000002EE  I*2  OTGNAM       32  (16)
 9-0000030E  I*2  OUNTYP       32  (16)
 6-000001CA  I*2  PCTSEM        8  (4)
 3-00000085  L*1  PREFIX      133  (133)
 9-00000052  I*2  PRENAM       32  (16)
 6-000000D4  I*2  RANHYP        6  (3)
```

```
  9-0000021A  I*2  RSTLIN                180  (90)
  6-00000154  I*2  SEMSPC                  6  (3)
  6-000000FE  I*2  SPCSTG                  4  (2)
  6-000001A8  I*2  SPHYSP                  8  (4)
  9-00000092  I*2  STRSTG                 32  (16)
  6-00000072  I*2  SUFDEF                  8  (4)
  9-00000072  I*2  SUFNAM                 32  (16)
  6-0000014C  I*2  TABEQS                  8  (4)
  6-000000CE  I*2  TABLAN                  6  (3)
  6-000001CA  I*2  TABOPR                  6  (3)
  6-000001C0  I*2  TABPRN                 10  (5)
  6-000000AC  I*2  TABRAN                  6  (3)
  6-0000008C  I*2  TABSTG                  4  (2)
  9-00000100  I*2  TAGNAM                 32  (16)
  9-0000047A  I*2  TMPVAL                162  (81)
  9-00000000  I*2  TOKSTG                 80  (40)
  6-00000238  I*2  UNDVLD                 18  (9)
  6-0000007A  I*2  UNITYP                  4  (2)
  6-00000192  I*2  ZEROSG                  4  (2)
  6-000000A2  I*2  ZRLAHY                 10  (5)

LABELS

    Address   Label        Address   Label

      **      10         0-0000004A  20
```

```
0001    C
0002    C       Version V02-001
0003    C
0004    C*****************************************************************************
0005    C*                                                                           *
0006    C*  COPYRIGHT (c) 1980                                                       *
0007    C*  BY DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASS.                         *
0008    C*                                                                           *
0009    C*  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND  COPIED   *
0010    C*  ONLY  IN  ACCORDANCE  WITH  THE  TERMS  OF  SUCH  LICENSE AND WITH THE   *
0011    C*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE.  THIS SOFTWARE OR  ANY  OTHER   *
0012    C*  COPIES  THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY   *
0013    C*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE  IS  HEREBY   *
0014    C*  TRANSFERRED.                                                             *
0015    C*                                                                           *
0016    C*  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE  WITHOUT  NOTICE   *
0017    C*  AND  SHOULD  NOT  BE  CONSTRUED  AS  A COMMITMENT BY DIGITAL EQUIPMENT   *
0018    C*  CORPORATION.                                                             *
0019    C*                                                                           *
0020    C*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR  RELIABILITY  OF  ITS   *
0021    C*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
0022    C*                                                                           *
0023    C*****************************************************************************
0024    C
0025            SUBROUTINE REAREND
0026    C
0027            INCLUDE 'SRC$:MDL32CMN.CMN'
0129            LOGICAL*1 GETIDENT,IDENT,UNBLNK,GETMARLIN
0130
0131            GOTO 100
0132
0133    90      CALL PUTLINE(LINE(1),LINELEN)
0134    100     IF (GETMARLIN().EQ..FALSE.) GOTO 2000
0135            IF (UNBLNK().EQ.';') GOTO 90
0136            IF (GETIDENT().EQ..FALSE.) GOTO 90
0137            IF (IDENT('$DEFINI',NAME).EQ..FALSE.) GOTO 90
0138
0139            CALL DEFINIF
0140            GOTO 90
0141
0142    2000    CONTINUE
0143            RETURN
0144            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	77	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	8	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	40	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4024	

ENTRY POINTS

Address	Type	Name
0-00000000		REAREND

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000C01A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-000C0196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	P .BUF	240	(120)

```
 9-00000662  I*2  BLINCR      162  (81)
 6-0000017E  I*2  BLSSIZ       20  (10)
 9-000003D8  I*2  BVALUE      162  (81)
 6-000000EA  I*2  BYTSIZ       20  (10)
 6-000001B4  I*2  COMGBL       12  (6)
 6-000000C4  I*2  COMMAS        4  (2)
 6-00000112  I*2  CONBAS       20  (10)
 6-00000126  I*2  CONINC       20  (10)
 9-0000012C  I*2  CONPRE       32  (16)
 9-0000014C  I*2  CONTAG       32  (16)
 9-000007A6  I*2  CONTEX      198  (9, 11)
 6-000001D6  I*2  CPAREN        4  (2)
 6-000001D0  I*2  CPRCOM        6  (3)
 9-00000170  I*2  CVALUE      162  (81)
 6-0000004C  I*2  DEFEND       20  (10)
 6-00000022  I*2  DEFINI       20  (10)
 6-000001DE  I*2  DOLBIT       26  (13)
 6-000001F8  I*2  DOLBYT       28  (14)
 6-00000036  I*2  DOLDEF       12  (6)
 6-00000214  I*2  DOLFLD       24  (12)
 6-00000016  I*2  DOLGBL       12  (6)
 6-00000234  I*2  DOLLAR        4  (2)
 6-00000090  I*2  DOLVLD       18  (9)
 6-000000DE  I*2  DOTBLK       12  (6)
 6-00000042  I*2  DOTEQS       10  (5)
 6-00000000  I*2  DOTMAC       22  (11)
 6-00000060  I*2  ENDMAC       18  (9)
 6-000000B2  I*2  EQULST       18  (9)
 6-00000102  I*2  EQUTAB       12  (6)
 6-0000007E  I*2  EXCLSP       14  (7)
 6-00000230  I*2  EXPCLO        4  (2)
 6-0000022C  I*2  EXPOPN        4  (2)
 9-000000B8  I*2  FLDNAM       72  (36)
 6-000001B0  I*2  HYPHEN        4  (2)
10-00000000  I*2  INBUF       166  (83)
 6-000000C8  I*2  LANHYP        6  (3)
 3-00000000  L*1  LINE        133  (133)
 6-0000013A  I*2  LITTAB       18  (9)
 6-0000015A  I*2  MACTAB       16  (8)
10-000000AA  I*2  MARBUF      240  (120)
 9-000005C0  I*2  MRBASE      162  (81)
 9-00000704  I*2  MRINCR      162  (81)
 9-00000336  I*2  MVALUE      162  (81)
 3-0000010A  L*1  NAME         32  (32)
 7-00000000  I*2  NEGSGN        4  (2)
 3-0000012A  L*1  NUMSTR      133  (133)
 6-000001DA  I*2  OASIGN        4  (2)
 6-0000016A  I*2  OFFSET       20  (10)
 6-000001A2  I*2  ONESHF        6  (3)
 6-0000010E  I*2  OPAREN        4  (2)
 9-000002CE  I*2  OSBNAM       32  (16)
 9-000002EE  I*2  OTGNAM       32  (16)
 9-0000030E  I*2  OUNTYP       32  (16)
 6-0000019A  I*2  PCTSEM        8  (4)
 3-00000085  L*1  PREFIX      133  (133)
 9-00000052  I*2  PRENAM       32  (16)
 6-000000D4  I*2  RANHYP        6  (3)
```

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label
0-0000000B	90	0-00000012	100	0-0000004C	2000

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	DEFINIF	L*1	GETIDENT	L*1	GETMARLIN	L*1	IDENT		PUTLINE	L*1	UNBLNK

GET

```
0001
0002            SUBROUTINE CONCAT(STRNG2,STRNG1,STRNG3)
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105            LOGICAL*1 STRNG1(*),STRNG2(*),STRNG3(*),STRNG4(132)
0106            DO 100 I=1,131
0107            STRNG4(I)=$TRNG2(I)
0108            IF (STRNG4(I).EQ.0) GOTO 200
0109    100     CONTINUE
0110            CALL ERRORF(2,TOOLONG)
0111            GOTO 600
0112    200     DO 300 I=1,131
0113            STRNG3(I)=$TRNG1(I)
0114            IF (STRNG3(I).EQ.0) GOTO 400
0115    300     CONTINUE
0116            CALL ERRORF(2,TOOLONG)
0117            GOTO 600
0118    400     DO 500 J=1,131
0119            STRNG3(I-1+J)=STRNG4(J)
0120            IF (STRNG3(I-1+J).EQ.0) GOTO 600
0121    500     CONTINUE
0122            CALL ERRORF(2,TOOLONG)
0123    600     RETURN
0124            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	176	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	212	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4291	

ENTRY POINTS

Address	Type	Name
0-00000000		CONCAT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-0000[illegible]B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000084	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	2-00000088	I*2	J
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM
9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF
5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK
11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT
9-00000050	I*2	TOKTYP	2-00000086	I*2	TOOLONG	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)

6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
AP-00000008@	L*1	STRNG1	**	(*)
AP-00000004@	L*1	STRNG2	**	(*)
AP-0000000C@	L*1	STRNG3	**	(*)
2-00000000	L*1	STRNG4	132	(132)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

GET

PRO

0
1
2
3
4
5
6
7
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9
10
11
12

ENT

0

VAR

4
12
9
8
12
9
10
4
12
9
9
9
12
2
5

ARR

6
6
9
10

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
**	100	0-00000052	200	**	300	0-0000007C	400	**	500	0-000000AF	600

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
	ERRORF

```
0001
0002            INTEGER FUNCTION LENGTH(STRNG)
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105            LOGICAL*1 STRNG(*)
0106            DO 100 LENGTH=1,132
0107            IF (STRNG(LENGTH).EQ.0) GOTO 200
0108    100     CONTINUE
0109            CALL ERRORF(2,TOOLONG)
0110    200     LENGTH=LENGTH-1
0111            RETURN
0112            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	62	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	36	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4001	

ENTRY POINTS

Address	Type	Name
0-00000000	I*2	LENGTH

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ

LENGTH

9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	2-00000000	I*2	TOOLONG
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)

9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
AP-00000004@	L*1	STRNG	**	(*)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label
**	100	0-00000036	200

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name
	ERRORF

```
0001
0002            SUBROUTINE MOVNAM(STRNG1,STRNG2)
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105            LOGICAL*1 STRNG1(*),STRNG2(*)
0106            DO 100 I=1,132
0107            STRNG2(I)=STRNG1(I)
0108            IF (STRNG2(I).EQ.0) GOTO 200
0109    100     CONTINUE
0110            CALL ERRORF(2,TOOLONG)
0111    200     RETURN
0112            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	72	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	56	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4031	

ENTRY POINTS

Address	Type	Name
0-00000000		MOVNAM

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS

9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
2-00000002	I*2	TOOLONG	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ
5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ			

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)

```
  9-00000336  I*2  MVALUE          162  (81)
  3-0000010A  L*1  NAME             32  (32)
  7-00000000  I*2  NEGSGN            4  (2)
  3-0000012A  L*1  NUMSTR          133  (133)
  6-000001DA  I*2  OASIGN            4  (2)
  6-0000016A  I*2  OFFSET           20  (10)
  6-000001A2  I*2  ONESHF            6  (3)
  6-0000010E  I*2  OPAREN            4  (2)
  9-000002CE  I*2  OSBNAM           32  (16)
  9-000002EE  I*2  OTGNAM           32  (16)
  9-0000030E  I*2  OUNTYP           32  (16)
  6-0000019A  I*2  PCTSEM            8  (4)
  3-00000085  L*1  PREFIX          133  (133)
  9-00000052  I*2  PRENAM           32  (16)
  6-000000D4  I*2  RANHYP            6  (3)
  9-0000021A  I*2  RSTLIN          180  (90)
  6-00000154  I*2  SEMSPC            6  (3)
  6-000000FE  I*2  SPCSTG            4  (2)
  6-000001A8  I*2  SPHYSP            8  (4)
AP-0000004@  L*1  STRNG1            **  (*)
AP-0000008@  L*1  STRNG2            **  (*)
  9-00000092  I*2  STRSTG           32  (16)
  6-00000072  I*2  SUFDEF            8  (4)
  9-00000072  I*2  SUFNAM           32  (16)
  6-0000014C  I*2  TABEQS            8  (4)
  6-000000CE  I*2  TABLAN            6  (3)
  6-000001CA  I*2  TABOPR            6  (3)
  6-000001C0  I*2  TABPRN           10  (5)
  6-000000AC  I*2  TABRAN            6  (3)
  6-0000008C  I*2  TABSTG            4  (2)
  9-00000100  I*2  TAGNAM           32  (16)
  9-0000047A  I*2  TMPVAL          162  (81)
  9-00000000  I*2  TOKSTG           80  (40)
  6-00000238  I*2  UNDVLD           18  (9)
  6-0000007A  I*2  UNITYP            4  (2)
  6-00000192  I*2  ZEROSG            4  (2)
  6-000000A2  I*2  ZRLAHY           10  (5)

LABELS

     Address   Label        Address   Label

       **      100        0-00000047  200

FUNCTIONS AND SUBROUTINES REFERENCED

   Type  Name

         ERRORF
```

```
0001
0002            FUNCTION GETNUM(FAILMODE)
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105            LOGICAL*1 GETNUM,GETVAL
0106            BYTE BINOPS(8)
0107            DATA BINOPS/'+','-','*','/','&','!','\','@'/
0108            GETNUM=.FALSE.
0109            NUM=0
0110            BEGCOL=COL
0111            IF (GETVAL().EQ..FALSE.) GOTO 300
0112            GETNUM=.TRUE.
0113            NUM=BINVAL
0114    100     DO 200 I=1,8
0115            IF (LINE(COL).EQ.BINOPS(I)) GOTO 400
0116    200     CONTINUE
0117    300     RETURN
0118    400     COL=COL+1
0119            IF (GETVAL().EQ..TRUE.) GOTO 500
0120            IF (FAILMODE.EQ.0) CALL ERRORF(3,MISSINGVALUE)
0121            GETNUM=.FALSE.
0122            COL=BEGCOL
0123            GOTO 300
0124    500     GOTO (610,620,630,640,650,660,670,680),I
0125    610     NUM=NUM+BINVAL
0126            GOTO 100
0127    620     NUM=NUM-BINVAL
0128            GOTO 100
0129    630     NUM=NUM*BINVAL
0130            GOTO 100
0131    640     NUM=NUM/BINVAL
0132            GOTO 100
0133    650     NUM=NUM.AND.BINVAL
0134            GOTO 100
0135    660     NUM=NUM.OR.BINVAL
0136            GOTO 100
0137    670     NUM=NUM.XOR.BINVAL
0138            GOTO 100
0139    680     NUM=NUM*2**BINVAL
0140            GOTO 100
0141            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	276	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	36	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4215	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETNUM

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
2-00000008	I*2	BEGCOL	4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS
9-00000332	I*2	BLFOFS	12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT
9-0000012A	I*2	BOFSET	9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL
5-00000016	L*2	CONEXP	8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL
11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT
AP-0000004@	I*2	FAILMODE	5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN
9-000000B4	I*2	FSIZ	2-0000000A	I*2	I	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN
10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN
9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR
10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	2-0000000C	I*2	MISSINGVALUE	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
2-00000000	L*1	BINOPS	8	(8)

9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)

9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-00000034	100	**	200	0-00000056	300	0-0000005B	400	0-00000086	500	0-0000009B	610
0-000000A8	620	0-000000B6	630	0-000000C4	640	0-000000D2	650	0-000000E3	660	0-000000F1	670
0-000000FF	680										

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	ERRORF	L*1	GETVAL

```
0001
0002            LOGICAL FUNCTION GETVAL*1
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105            LOGICAL*1 UNBLNK,TMP
0106            SIGN=0
0107            BINVAL=0
0108            GETVAL=.FALSE.
0109            IF (UNBLNK().NE.'-') GOTO 100
0110            SIGN=1
0111            COL=COL+1
0112    100     IF (UNBLNK().NE.'+') GOTO 110
0113            COL=COL+1
0114            GOTO 100
0115    110     IF (LINE(COL).NE.'^') GOTO 180
0116            IF (LINE(COL+1).NE.'X') GOTO 180
0117            DO 150 COL=COL+2,132
0118            TMP=LINE(COL)
0119            IF ((TMP.LE.'9').AND.(TMP.GE.'0')) GOTO 130
0120            IF ((TMP.GT.'F').OR.(TMP.LT.'A')) GOTO 400
0121            TMP=TMP-'A'+'9'+1
0122    130     GETVAL=.TRUE.
0123            BINVAL=BINVAL*16+(TMP-'0')
0124    150     CONTINUE
0125            GOTO 300
0126    180     DO 200 COL=COL,132
0127            IF (LINE(COL).LT.'0') GOTO 400
0128            IF (LINE(COL).GT.'9') GOTO 400
0129            GETVAL=.TRUE.
0130            BINVAL=BINVAL*10+(LINE(COL)-'0')
0131    200     CONTINUE
0132    300     CALL ERRORF(4,TOOLONG)
0133            GETVAL=.FALSE.
0134    400     IF (SIGN.EQ.1) BINVAL=-BINVAL
0135            RETURN
0136            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	311	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	28	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MGRSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	13	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4241	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETVAL

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000007	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000B	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ
9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	2-00000000	I*2	SIGN	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	L*1	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
2-00000002	I*2	TOOLONG	12-00000009	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ
5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ			

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

```
  9-00000662  I*2  BLINCR      162  (81)
  6-0000017E  I*2  BLSSIZ       20  (10)
  9-000003D8  I*2  BVALUE      162  (81)
  6-000000EA  I*2  BYTSIZ       20  (10)
  6-000001B4  I*2  COMGBL       12  (6)
  6-000000C4  I*2  COMMAS        4  (2)
  6-00000112  I*2  CONBAS       20  (10)
  6-00000126  I*2  CONINC       20  (10)
  9-0000012C  I*2  CONPRE       32  (16)
  9-0000014C  I*2  CONTAG       32  (16)
  9-000007A6  I*2  CONTEX      198  (9, 11)
  6-000001D6  I*2  CPAREN        4  (2)
  6-000001D0  I*2  CPRCOM        6  (3)
  9-00000170  I*2  CVALUE      162  (81)
  6-0000004C  I*2  DEFEND       20  (10)
  6-00000022  I*2  DEFINI       20  (10)
  6-000001DE  I*2  DOLBIT       26  (13)
  6-000001F8  I*2  DOLBYT       28  (14)
  6-00000036  I*2  DOLDEF       12  (6)
  6-00000214  I*2  DOLFLD       24  (12)
  6-00000016  I*2  DOLGBL       12  (6)
  6-00000234  I*2  DOLLAR        4  (2)
  6-00000090  I*2  DOLVLD       18  (9)
  6-000000DE  I*2  DOTBLK       12  (6)
  6-00000042  I*2  DOTEQS       10  (5)
  6-00000000  I*2  DOTMAC       22  (11)
  6-00000060  I*2  ENDMAC       18  (9)
  6-000000B2  I*2  EQULST       18  (9)
  6-00000102  I*2  EQUTAB       12  (6)
  6-0000007E  I*2  EXCLSP       14  (7)
  6-00000230  I*2  EXPCLO        4  (2)
  6-0000022C  I*2  EXPOPN        4  (2)
  9-000000B8  I*2  FLDNAM       72  (36)
  6-000001B0  I*2  HYPHEN        4  (2)
 10-00000000  I*2  INBUF       166  (83)
  6-000000C8  I*2  LANHYP        6  (3)
  3-00000000  L*1  LINE        133  (133)
  6-0000013A  I*2  LITTAB       18  (9)
  6-0000015A  I*2  MACTAB       16  (8)
 10-000000AA  I*2  MARBUF      240  (120)
  9-000005C0  I*2  MRBASE      162  (81)
  9-00000704  I*2  MRINCR      162  (81)
  9-00000336  I*2  MVALUE      162  (81)
  3-0000010A  L*1  NAME         32  (32)
  7-00000000  I*2  NEGSGN        4  (2)
  3-0000012A  L*1  NUMSTR      133  (133)
  6-000001DA  I*2  OASIGN        4  (2)
  6-0000016A  I*2  OFFSET       20  (10)
  6-000001A2  I*2  ONESHF        6  (3)
  6-0000010E  I*2  OPAREN        4  (2)
  9-000002CE  I*2  OSBNAM       32  (16)
  9-000002EE  I*2  OTGNAM       32  (16)
  9-0000030E  I*2  OUNTYP       32  (16)
  6-0000019A  I*2  PCTSEM        8  (4)
  3-00000085  L*1  PREFIX      133  (133)
  9-00000052  I*2  PRENAM       32  (16)
  6-000000D4  I*2  RANHYP        6  (3)
```

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000002B	100	0-00000043	110	0-000000AB	130	**	150	0-000000CC	180	**	200
0-00000116	300	0-00000121	400								

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	ERRORF	L*1	UNBLNK

ERR

PRO

0
1
2
3
4
5
6
7
8
9
10
11
12

ENT

0

VAR

4
12
9
8
12
9
12
9
9
9
11
9

ARR

6
6
10

```
0001
0002            LOGICAL FUNCTION GETIDENT*1
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105            LOGICAL*1 UNBLNK,IDENT
0106            I=1
0107            GETIDENT=.FALSE.
0108            IF (UNBLNK().EQ.';') GOTO 400
0109            DO 200 COL=COL,132
0110            IF (LINE(COL).EQ.'.') GOTO 100
0111            IF (LINE(COL).EQ.'$') GOTO 100
0112            IF (LINE(COL).EQ.' ') GOTO 100
0113            IF ((LINE(COL).GE.'A').AND.(LINE(COL).LE.'Z')) GOTO 100
0114            IF ((LINE(COL).GE.'a').AND.(LINE(COL).LE.'z')) GOTO 100
0115            IF (GETIDENT.EQ..FALSE.) GOTO 400
0116            IF ((LINE(COL).LT.'0').OR.(LINE(COL).GT.'9')) GOTO 400
0117    100     GETIDENT=.TRUE.
0118            IF (I.GE.32) GOTO 200
0119            NAME(I)=LINE(COL)
0120            I=I+1
0121    200     CONTINUE
0122            CALL ERRORF(4,TOOLONG)
0123    400     CONTINUE
0124            NAME(I)=0
0125    C       TYPE 99,(NAME(K),K=1,LENGTH(NAME))
0126    C99     FORMAT(' ID=',32A1)
0127            RETURN
0128            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	205	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	4	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	28	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4136	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETIDENT

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000002	I*2	I
2-00000000	L*1	IDENT	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM
9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF
5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK
11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT
9-00000050	I*2	TOKTYP	2-00000004	I*2	TOOLONG	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK
9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)

9
6
6
6
9
6
9
6
6
6
6
6
6
9
9
9
6
6
6

LAB

0
1
1

```
  6-00000234   I*2  DOLLAR          4  (2)
  6-00000090   I*2  DOLVLD         18  (9)
  6-000000DE   I*2  DOTBLK         12  (6)
  6-00000042   I*2  DOTEQS         10  (5)
  6-00000000   I*2  DOTMAC         22  (11)
  6-00000060   I*2  ENDMAC         18  (9)
  6-000000B2   I*2  EQULST         18  (9)
  6-00000102   I*2  EQUTAB         12  (6)
  6-0000007E   I*2  EXCLSP         14  (7)
  6-00000230   I*2  EXPCLO          4  (2)
  6-0000022C   I*2  EXPOPN          4  (2)
  9-000000B8   I*2  FLDNAM         72  (36)
  6-000001B0   I*2  HYPHEN          4  (2)
 10-00000000   I*2  INBUF         166  (83)
  6-000000C8   I*2  LANHYP          6  (3)
  3-00000000   L*1  LINE          133  (133)
  6-0000013A   I*2  LITTAB         18  (9)
  6-0000015A   I*2  MACTAB         16  (8)
 10-000000AA   I*2  MARBUF        240  (120)
  9-000005C0   I*2  MRBASE        162  (81)
  9-00000704   I*2  MRINCR        162  (81)
  9-00000336   I*2  MVALUE        162  (81)
  3-0000010A   L*1  NAME           32  (32)
  7-00000000   I*2  NEGSGN          4  (2)
  3-0000012A   L*1  NUMSTR        133  (133)
  6-000001DA   I*2  OASIGN          4  (2)
  6-0000016A   I*2  OFFSET         20  (10)
  6-000001A2   I*2  ONESHF          6  (3)
  6-0000010E   I*2  OPAREN          4  (2)
  9-000002CE   I*2  OSBNAM         32  (16)
  9-000002EE   I*2  OTGNAM         32  (16)
  9-0000030E   I*2  OUNTYP         32  (16)
  6-0000019A   I*2  PCTSEM          8  (4)
  3-00000085   L*1  PREFIX        133  (133)
  9-00000052   I*2  PRENAM         32  (16)
  6-000000D4   I*2  RANHYP          6  (3)
  9-0000021A   I*2  RSTLIN        180  (90)
  6-00000154   I*2  SEMSPC          6  (3)
  6-000000FE   I*2  SPCSTG          4  (2)
  6-000001A8   I*2  SPHYSP          8  (4)
  9-00000092   I*2  STRSTG         32  (16)
  6-00000072   I*2  SUFDEF          8  (4)
  9-00000072   I*2  SUFNAM         32  (16)
  6-0000014C   I*2  TABEQS          8  (4)
  6-000000CE   I*2  TABLAN          6  (3)
  6-000001CA   I*2  TABOPR          6  (3)
  6-000001C0   I*2  TABPRN         10  (5)
  6-000000AC   I*2  TABRAN          6  (3)
  6-0000008C   I*2  TABSTG          4  (2)
  9-00000100   I*2  TAGNAM         32  (16)
  9-0000047A   I*2  TMPVAL        162  (81)
  9-00000000   I*2  TOKSTG         80  (40)
  6-00000238   I*2  UNDVLD         18  (9)
  6-0000007A   I*2  UNITYP          4  (2)
  6-00000192   I*2  ZEROSG          4  (2)
  6-000000A2   I*2  ZRLAHY         10  (5)
```

LABELS

Address	Label	Address	Label	Address	Label
0-00000084	100	0-000000A9	200	0-000000BD	400

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	ERRORF	L*1	UNBLNK

```
0001
0002            LOGICAL FUNCTION IDENT*1(STRNG1,STRNG2)
0003            LOGICAL*1 STRNG1(*),STRNG2(*)
0004            IDENT=.FALSE.
0005            DO 100 I=1,132
0006            IF (STRNG1(I).EQ.0.AND.STRNG2(I).EQ.0) GOTO 200
0007            IF (STRNG1(I).NE.STRNG2(I)) GOTO 300
0008    100     CONTINUE
0009    200     IDENT=.TRUE.
0010    300     RETURN
0011            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	85	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	44	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	129	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	IDENT

VARIABLES

Address	Type	Name
2-00000000	I*2	I

ARRAYS

Address	Type	Name	Bytes	Dimensions
AP-0000004@	L*1	STRNG1	**	(*)
AP-0000008@	L*1	STRNG2	**	(*)

LABELS

Address	Label	Address	Label	Address	Label
**	100	0-0000004C	200	0-00000050	300

```
0001
0002            LOGICAL FUNCTION UNBLNK*1
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105            IF (COL.GT.132) GOTO 150
0106            DO 100 COL=COL,132
0107            IF (LINE(COL).GE.'11.AND.LINE(COL).LE.'14) GOTO 100
0108            IF (LINE(COL).NE.' ') GOTO 200
0109    100     CONTINUE
0110    150     COL=133
0111    200     UNBLNK=LINE(COL)
0112            RETURN
0113            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	90	PIC CON REL LCL SHR EXE RD NOWRT LONG
2	$LOCAL	4	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	3993	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	UNBLNK

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP
10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ

9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-00000184	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)

9-00000336	I*2	MVALUE	162	(81)	000
3-0000010A	L*1	NAME	32	(32)	000
7-00000000	I*2	NEGSGN	4	(2)	000
3-0000012A	L*1	NUMSTR	133	(133)	010
6-000001DA	I*2	OASIGN	4	(2)	010
6-0000016A	I*2	OFFSET	20	(10)	010
6-000001A2	I*2	ONESHF	6	(3)	010
6-0000010E	I*2	OPAREN	4	(2)	010
9-000002CE	I*2	OSBNAM	32	(16)	011
9-000002EE	I*2	OTGNAM	32	(16)	011
9-0000030E	I*2	OUNTYP	32	(16)	011
6-0000019A	I*2	PCTSEM	8	(4)	011
3-00000085	L*1	PREFIX	133	(133)	011
9-00000052	I*2	PRENAM	32	(16)	011
6-000000D4	I*2	RANHYP	6	(3)	011
9-0000021A	I*2	RSTLIN	180	(90)	011
6-00000154	I*2	SEMSPC	6	(3)	011
6-000000FE	I*2	SPCSTG	4	(2)	011
6-000001A8	I*2	SPHYSP	8	(4)	012
9-00000092	I*2	STRSTG	32	(16)	012
6-00000072	I*2	SUFDEF	8	(4)	012
9-00000072	I*2	SUFNAM	32	(16)	012
6-0000014C	I*2	TABEQS	8	(4)	012
6-000000CE	I*2	TABLAN	6	(3)	012
6-000001CA	I*2	TABOPR	6	(3)	012
6-000001C0	I*2	TABPRN	10	(5)	012
6-000000AC	I*2	TABRAN	6	(3)	012
6-0000008C	I*2	TABSTG	4	(2)	012
9-00000100	I*2	TAGNAM	32	(16)	013
9-0000047A	I*2	TMPVAL	162	(81)	013
9-00000000	I*2	TOKSTG	80	(40)	013
6-00000238	I*2	UNDVLD	18	(9)	013
6-0000007A	I*2	UNITYP	4	(2)	013
6-00000192	I*2	ZEROSG	4	(2)	013
6-000000A2	I*2	ZRLAHY	10	(5)	013
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LABELS

Address	Label	Address	Label	Address	Label
0-0000003C	100	0-00000045	150	0-0000004A	200

```
0001
0002            LOGICAL*1 FUNCTION GETMARLIN
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105            GETMARLIN=.FALSE.
0106            LINE(1)=';'
0107            COL=1
0108            READ(MAR,99,END=100) LINELEN,(LINE(K),K=1,132)
0109    99      FORMAT(Q,132A1)
0110            GETMARLIN=.TRUE.
0111    100     CONTINUE
0112            LINE(133)=';'
0113    C       TYPE 98,(LINE(K),K=1,133)
0114    C98     FORMAT(1X,72A1/1X,72A1)
0115            RETURN
0116            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	121	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	7	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	4	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4031	

ENTRY POINTS

Address	Type	Name
0-00000000	L*1	GETMARLIN

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	12-00000000	I*2	INP

10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	2-00000000	I*2	K	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK
9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-0000C0B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-0000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-00000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-00000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)

6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-000C010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label
1-00000000	99'	0-0000006D	100

```
0001
0002            SUBROUTINE ERRORF(MSGID)
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105    C OUTPUT CONTENTS OF 'LINE' VIA PRINT
0106    C AND ERROR MESSAGE
0107            TYPE 99
0108    99      FORMAT('$%MDLFIXUP-E-')
0109            GOTO (1,2,3,4,5,6),MSGID
0110            TYPE 1000
0111            GOTO 200
0112    1000    FORMAT('+error in error processing')
0113    1       TYPE 101
0114            GOTO 200
0115    101     FORMAT('+syntax error')
0116    2       TYPE 102
0117            GOTO 200
0118    102     FORMAT('+symbol or string too long')
0119    3       TYPE 103
0120            GOTO 200
0121    103     FORMAT('+missing value')
0122    4       TYPE 104
0123            GOTO 200
0124    104     FORMAT('+line too long')
0125    5       TYPE 105
0126            GOTO 200
0127    105     FORMAT('+missing close angle bracket')
0128    6       TYPE 106
0129            GOTO 200
0130    106     FORMAT('+missing E (end) statement')
0131    200     CONTINUE
0132            TYPE 98,(LINE(I),I=1,LINELEN)
0133    98      FORMAT(1X,<LINELEN>A1)
0134            END
```

DEF

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PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	302	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	194	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	4	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4399	

ENTRY POINTS

Address	Type	Name
0-00000000		ERRORF

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	2-00000000	I*2	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
9-0000086E	I*2	MNGCNT	AP-00000004@	I*2	MSGID	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM
9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF
5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK
11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT
9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ
5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ			

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)

9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)

9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-0000004B	1	0-00000064	2	0-0000007D	3	0-00000096	4	0-000000AF	5	0-000000C8	6
1-000000B8	98'	1-00000000	99'	1-0000002D	101'	1-0000003D	102'	1-0000005A	103'	1-0000006B	104'
1-0000007C	105'	1-0000009B	106'	0-000000E1	200	1-00000010	1000'				

```
0001
0002            SUBROUTINE VIELDF
0003    C       ROUTINE TO HANDLE MDL VIELD SYNTAX
0004
0005            INCLUDE 'SRC$:MDL32CMN.CMN'
0107            LOGICAL*1 GETIDENT,UNBLNK,GETNUM,IDENT,GETMARLIN
0108            BYTE TAB5(6),EQULINE(132),SAVENAME(32)
0109            DATA TAB5/9,9,9,9,9,0/
0110
0111            PREFIX(1)=NAME(1)
0112            PREFIX(2)=0
0113            IF (GETIDENT().EQ..FALSE.) GOTO 2000
0114            CALL CONCAT(PREFIX,NAME,PREFIX)
0115            IF (UNBLNK().NE.',') GOTO 2000
0116            COL=COL+1
0117            BIT=0
0118            IF (GETNUM(0)) BIT=NUM
0119            IF (UNBLNK().NE.',') GOTO 2000
0120            COL=COL+1
0121            IF (UNBLNK().NE.'<') GOTO 2000
0122            COL=COL+1
0123            IF (UNBLNK().NE.'-') GOTO 2000
0124            COL=COL+1
0125            IF (UNBLNK().EQ.';') GOTO 700
0126    2000    CALL ERRORF(1,SYNTAX)
0127    700     IF (GETMARLIN().NE..TRUE.) GOTO 1500
0128            IF (UNBLNK().EQ.'>') GOTO 1600
0129            IF (UNBLNK().EQ.'-') THEN
0130               COL=COL+1
0131               IF (UNBLNK().NE.';') GOTO 2000
0132               LINE(LINELEN+1)=0
0133               CALL CONCAT(LINE(COL),TAB5,EQULINE)
0134               CALL PUTLINE(EQULINE,LENGTH(EQULINE))
0135               GOTO 700
0136            ENDIF
0137            IF (UNBLNK().NE.'<') GOTO 2000
0138            COL=COL+1
0139    C
0140    C SET UP COMMENT COPY FOR SPACE HOLDER DEFINITION
0141    C
0142            CALL MOVNAM(TAB5(2),EQULINE)
0143            VFORM=0
0144            IF (GETIDENT().NE..TRUE.) GOTO 900
0145            VFORM=1
0146            CALL CONCAT('V ',PREFIX,EQULINE)
0147            CALL MOVNAM(NAME,SAVENAME)
0148            CALL CONCAT(SAVENAME,EQULINE,EQULINE)
0149            CALL CONCAT(EQULINE,' $EQU      ',EQULINE)
0150            CALL CONCAT(TAB5(5),EQULINE,EQULINE)
0151            BINVAL=BIT
0152            CALL MAKENUM(BINVAL)
0153            CALL CONCAT(NUMSTR,EQULINE,EQULINE)
0154    900     SIZE=1
0155            IF (UNBLNK().NE.',') GOTO 2000
0156            COL=COL+1
0157            IF (GETNUM(0)) SIZE=NUM
0158            IF (UNBLNK().NE.',') GOTO 2000
```

```
0159            COL=COL+1
0160            MASKFORM=0
0161            IF (GETIDENT().NE..TRUE.) GOTO 950
0162            IF (IDENT('M',NAME).NE..TRUE.) GOTO 2000
0163            IF (VFORM.EQ.1) MASKFORM=1
0164    950     IF (UNBLNK().NE.'>') GOTO 2000
0165            COL=COL+1
0166            IF (UNBLNK().NE.'-') GOTO 2000
0167            COL=COL+1
0168            IF (UNBLNK().NE.';') GOTO 2000
0169            LINE(LINELEN+1)=0
0170            IF (COL.LT.LINELEN) THEN
0171               CALL CONCAT(TAB5(4),EQULINE,EQULINE)
0172               CALL CONCAT(LINE(COL),EQULINE,EQULINE)
0173            ENDIF
0174            CALL PUTLINE(EQULINE,LENGTH(EQULINE))
0175            IF (MASKFORM.EQ.0) GOTO 960
0176            CALL CONCAT('M_',PREFIX,EQULINE)
0177            CALL CONCAT(SAVENAME,EQULINE,EQULINE)
0178            CALL CONCAT(EQULINE,' $EQU      ',EQULINE)
0179            CALL CONCAT(TAB5(5),EQULINE,EQULINE)
0180            BINVAL=SIZE                             !TO FORCE 32 BIT CALC
0181            BINVAL=ISHFT(1,BINVAL)
0182            IF (BINVAL.EQ.'80000000'X) THEN
0183              BINVAL='7FFFFFFF'X                    !AVOID INTEGER OVERFLOW
0184             ELSE
0185              BINVAL=BINVAL-1
0186            ENDIF
0187            CALL MAKENUM(ISHFT(BINVAL,BIT))
0188            CALL CONCAT(NUMSTR,EQULINE,EQULINE)
0189            CALL PUTLINE(EQULINE,LENGTH(EQULINE))
0190    960     IF (SIZE.EQ.1) GOTO 980
0191            IF (VFORM.EQ.0) GOTO 980
0192            CALL CONCAT('S_',PREFIX,EQULINE)
0193            CALL CONCAT(SAVENAME,EQULINE,EQULINE)
0194            CALL CONCAT(EQULINE,' $EQU      ',EQULINE)
0195            CALL CONCAT(TAB5(5),EQULINE,EQULINE)
0196            BINVAL=SIZE
0197            CALL MAKENUM(BINVAL)
0198            CALL CONCAT(NUMSTR,EQULINE,EQULINE)
0199            CALL PUTLINE(EQULINE,LENGTH(EQULINE))
0200    980     BIT=BIT+SIZE
0201            GOTO 700
0202
0203    1500    CALL ERRORF(5,NOCLOSEANGLE)
0204    1600    RETURN
0205            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	890	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	30	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	544	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	5363	

ENTRY POINTS

Address	Type	Name
0-00000000		VIELDF

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	2-000000AA	I*2	BIT	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS
9-00000332	I*2	BLFOFS	12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT
9-0000012A	I*2	BOFSET	9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL
5-00000016	L*2	CONEXP	8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL
11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT
5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	9-0000051C	I*2	LASLIN
9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR
9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS
2-000000B2	I*2	MASKFORM	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	2-000000B4	I*2	NOCLOSEANGLE
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ
5-00000018	L*2	POSOFF	2-000000B0	I*2	SIZE	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	2-000000AC	I*2	SYNTAX	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	2-000000AE	I*2	VFORM
5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ			

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)

10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
2-00000006	L*1	EQULINE	132	(132)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-0000C1A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)

EQU

9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
2-0000008A	L*1	SAVENAME	32	(32)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
2-00000000	L*1	TABS	6	(6)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-00000096	700	0-0000017F	900	0-000001DE	950	0-00000308	960	0-00000368	980	0-00000370	1500
0-00000379	1600	0-0000008E	2000								

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	CONCAT		ERRORF	L*1	GETIDENT	L*1	GETMARLIN	L*1	GETNUM	L*1	IDENT
I*2	LENGTH		MAKENUM		MOVNAM		PUTLINE	L*1	UNBLNK		

EQU

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```
0001
0002            SUBROUTINE DEFINIF
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105            LOGICAL*1 GETIDENT,UNBLNK,GETNUM,IDENT,GETMARLIN
0106
0107            BYTE TAB3(4),DEFSYM(133),COMMENT(133)
0108            DATA TAB3/9,9,9,0/
0109
0110            PREFIX(1)=0
0111            DEFFLAG=0
0112
0113    90      CALL PUTLINE(LINE,LINELEN)
0114    100     IF (GETMARLIN().EQ..FALSE.) GOTO 3000
0115    C
0116    C  PROCESS $DEFINI INPUT.
0117    C
0118            IF (UNBLNK().EQ.';') GOTO 90
0119            IF (GETIDENT().EQ..FALSE.) GOTO 90
0120            IF (IDENT('$EQU',NAME).EQ..TRUE.) GOTO 90
0121            IF (IDENT('$DEF',NAME).EQ..TRUE.) GOTO 200
0122            IF (IDENT('$VIELD',NAME).EQ..TRUE.) GOTO 300
0123            IF (IDENT('_VIELD',NAME).EQ..TRUE.) GOTO 300
0124            IF (IDENT('$EQULST',NAME).EQ..TRUE.) GOTO 400
0125            IF (IDENT('$DEFEND',NAME).EQ..TRUE.) THEN
0126               IF (DEFFLAG.EQ.1) THEN
0127                  IF (COMMENTSIZE.GT.0) THEN
0128                     CALL CONCAT(TAB3,DEFSYM,DEFSYM)
0129                     CALL CONCAT(COMMENT,DEFSYM,DEFSYM)
0130                  ENDIF
0131                  CALL PUTLINE(DEFSYM,LENGTH(DEFSYM))
0132               ENDIF
0133            RETURN
0134            ENDIF
0135    C
0136    C CHECK FOR .=NN SYNTAX
0137    C
0138            IF (IDENT('.',NAME).EQ..TRUE.) THEN
0139               IF (DEFFLAG.EQ.1) THEN
0140                  IF (COMMENTSIZE.GT.0) THEN
0141                     CALL CONCAT(TAB3,DEFSYM,DEFSYM)
0142                     CALL CONCAT(COMMENT,DEFSYM,DEFSYM)
0143                  ENDIF
0144                  CALL PUTLINE(DEFSYM,LENGTH(DEFSYM))
0145               ENDIF
0146            DEFFLAG=0
0147            GOTO 90
0148            ENDIF
0149    C
0150    C NOW FINALLY HANDLE .BLKX DIRECTIVE MERGING
0151    C
0152            IF ((IDENT('.BLKL',NAME).EQ..FALSE.).AND.
0153            1   (IDENT('.BLKB',NAME).EQ..FALSE.).AND.
0154            2   (IDENT('.BLKW',NAME).EQ..FALSE.).AND.
0155            3   (IDENT('.BLKQ',NAME).EQ..FALSE.)) GOTO 2000
0156            IF (DEFFLAG.EQ.0) GOTO 90
0157            CALL MOVNAM(NAME,PREFIX)
0158            NUM=1
```

```
0159            IF (UNBLNK().EQ.';') GOTO 150
0160            IF (GETNUM(0).EQ..FALSE.) GOTO 2000
0161            IF (UNBLNK().NE.';') GOTO 2000
0162    150     CALL CONCAT(9,DEFSYM,DEFSYM)
0163            CALL CONCAT(PREFIX,DEFSYM,DEFSYM)
0164            IF (NUM.NE.1) THEN
0165               CALL CONCAT(9,DEFSYM,DEFSYM)
0166               CALL MAKENUM(NUM)
0167               CALL CONCAT(NUMSTR,DEFSYM,DEFSYM)
0168            ENDIF
0169            IF (COMMENTSIZE.NE.0) THEN
0170               CALL CONCAT(9,DEFSYM,DEFSYM)
0171               IF (NUM.EQ.1) CALL CONCAT(9,DEFSYM,DEFSYM)
0172               CALL CONCAT(COMMENT,DEFSYM,DEFSYM)
0173            ENDIF
0174            CALL PUTLINE(DEFSYM,LENGTH(DEFSYM))
0175            DEFFLAG=0
0176            GOTO 100
0177
0178    200     IF (DEFFLAG.EQ.1) THEN
0179               IF (COMMENTSIZE.GT.0) THEN
0180                  CALL CONCAT(TAB3,DEFSYM,DEFSYM)
0181                  CALL CONCAT(COMMENT,DEFSYM,DEFSYM)
0182               ENDIF
0183               CALL PUTLINE(DEFSYM,LENGTH(DEFSYM))
0184            ENDIF
0185            DEFFLAG=0
0186            IF (GETIDENT().EQ..FALSE.) GOTO 2000
0187            CALL MOVNAM(NAME,DEFSYM)
0188            CALL CONCAT(DEFSYM,' $DEF       ',DEFSYM)
0189            IF (UNBLNK().NE.';') GOTO 2000
0190            DEFFLAG=1
0191            COMMENT(1)=0
0192            IF (COL.LT.LINELEN) THEN
0193              LINE(LINELEN+1)=0
0194              CALL MOVNAM(LINE(COL),COMMENT)
0195            ENDIF
0196            COMMENTSIZE=LENGTH(COMMENT)
0197            GOTO 100
0198
0199    300     CALL VIELDF
0200            GOTO 100
0201
0202    400     CONTINUE
0203            CALL EQULSTF
0204            GOTO 100
0205    C THE FOLLOWING CODE WILL SUPPRESS EQULST PROCESSING
0206    C       CALL PUTLINE(LINE,LINELEN)
0207    C       IF (GETMARLIN().NE..TRUE.) GOTO 2000
0208    C       IF (UNBLNK().EQ.'>') GOTO 90
0209    C       GOTO 400
0210
0211    2000    CALL ERRORF(1,SYNTAX)
0212            GOTO 90
0213    3000    CALL ERRORF(6,MISSINGE)
0214            RETURN
0215            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	746	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	89	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	728	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	5462	

ENTRY POINTS

Address	Type	Name
0-00000000		DEFINIF

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	2-00000110	I*2	COMMENTSIZE
5-00000016	L*2	CONEXP	8-00000000	I*2	DEBUG	2-0000010E	I*2	DEFFLAG	5-00000014	L*2	ENDEXP
5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR
5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN
9-000000B4	I*2	FSIZ	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	2-00000114	I*2	MISSINGE	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT
4-00000000	I*4	NUM	9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ
5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL
5-00000006	L*2	STROK	2-00000112	I*2	SYNTAX	11-00000002	I*2	TAB	12-00000006	I*2	TMP
5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY
5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET
9-00000128	I*2	VSIZ									

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)

10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
2-00000089	L*1	COMMENT	133	(133)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
2-00000004	L*1	DEFSYM	133	(133)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)

3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
2-00000000	L*1	TAB3	4	(4)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-00000012	90	0-00000019	100	0-0000019D	150	0-00000217	200	0-000002C0	300	0-000002CA	400
0-000002D4	2000	0-000002E0	3000								

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	CONCAT		EQULSTF		ERRORF	L*1	GETIDENT	L*1	GETMARLIN	L*1	GETNUM
L*1	IDENT	I*2	LENGTH		MAKENUM		MOVNAM		PUTLINE	L*1	UNBLNK
	VIELDF										

```
0001
0002            SUBROUTINE PUTLINE(STRING,LENGTH)
0003            BYTE STRING(*)
0004            J=LENGTH
0005            DO 100 J=J,1,-1
0006            IF (STRING(J).NE.' ') GOTO 200
0007    100     CONTINUE
0008            WRITE(8, 98)
0009    98      FORMAT()
0010            RETURN
0011    200     WRITE(8, 99) (STRING(I),I=1,J)
0012    99      FORMAT(<J>A1)
0013            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	147	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	9	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	24	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
	Total Space Allocated	180	

ENTRY POINTS

Address	Type	Name
0-00000000		PUTLINE

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name
2-00000002	I*2	I	2-00000000	I*2	J	AP-00000008@	I*2	LENGTH

ARRAYS

Address	Type	Name	Bytes	Dimensions
AP-00000004@	L*1	STRING	**	(*)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label
1-00000000	98'	1-00000001	99'	**	100	0-0000004D	200

```
0001
0002            SUBROUTINE MAKENUM(I)
0003            INCLUDE 'SRC$:MDL32CMN.CMN'
0105
0106            INTEGER*4 I
0107            BYTE STRING(12)
0108
0109            IF ((I.GT.256).OR.(I.LT.0)) THEN
0110               CALL MOVNAM('<^X',NUMSTR)
0111               ENCODE(11,98,STRING) I
0112             ELSE
0113               NUMSTR(1)=0
0114               ENCODE(11,99,STRING) I
0115            ENDIF
0116            STRING(12)=0
0117            DO 100 J=1,11
0118            IF (STRING(J).NE.' ') GOTO 200
0119    100     CONTINUE
0120    200     CALL CONCAT(STRING(J),NUMSTR,NUMSTR)
0121
0122    98      FORMAT(Z10,'>')
0123    99      FORMAT(I11)
0124
0125            END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	154	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	13	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	52	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	4118	

ENTRY POINTS

Address	Type	Name
0-00000000		MAKENUM

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS	9-00000332	I*2	BLFOFS
12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT	9-0000012A	I*2	BOFSET
9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL	5-00000016	L*2	CONEXP
8-00000000	I*2	DEBUG	5-00000014	L*2	ENDEXP	5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH
12-00000008	I*2	ERR	5-00000002	L*2	ERROR	5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS
9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN	9-000000B4	I*2	FSIZ	AP-0000004@	I*4	I
12-00000000	I*2	INP	10-000000A8	I*2	INPLIN	10-000000A6	I*2	INPTR	2-0000000C	I*2	J
9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ	4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP
9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ	12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR
12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT	9-0000086C	I*2	NEGCNT	4-00000000	I*4	NUM
9-00000334	I*2	OBBITS	9-0000032E	I*2	OFSIZ	9-00000330	I*2	OUNSIZ	5-00000018	L*2	POSOFF
5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	5-00000004	L*2	STGEQL	5-00000006	L*2	STROK
11-00000002	I*2	TAB	12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT
9-00000050	I*2	TOKTYP	12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ
5-0000000A	L*2	VMASK	9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ			

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
6-000000B2	I*2	EQULST	18	(9)

6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-0000J0B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)
6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
2-00000000	L*1	STRING	12	(12)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label
1-00000004	98'	1-0000000A	99'	**	100	0-00000087	200

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name
	CONCAT		MOVNAM

```
0001
0002            SUBROUTINE EQULSTF
0003    C       ROUTINE TO HANDLE MDL EQULST SYNTAX
0004
0005            INCLUDE 'SRC$:MDL32CMN.CMN'
0107            LOGICAL*1 GETIDENT,UNBLNK,GETNUM,IDENT,GETMARLIN
0108            BYTE TAB5(6),EQULINE(132),SAVENAME(32)
0109            DATA TAB5/9,9,9,9,9,0/
0110            DATA KNOWNVAL/0/
0111            INTEGER*4 STARTVAL,INCRVAL
0112
0113            IF (GETIDENT().EQ..FALSE.) GOTO 2000
0114            CALL MOVNAM(NAME,PREFIX)
0115            IF (UNBLNK().NE.',') GOTO 2000
0116            COL=COL+1
0117            IF (GETIDENT().EQ..FALSE.) GOTO 2000
0118            IF (IDENT(NAME,'$GBL').NE..TRUE.) GOTO 2000
0119            IF (UNBLNK().NE.',') GOTO 2000
0120            COL=COL+1
0121            IF (GETNUM(0).EQ..FALSE.) THEN
0122               IF (UNBLNK().EQ.','.AND.KNOWNVAL.EQ.1) GOTO 500
0123               KNOWNVAL=0
0124               CALL PUTLINE(LINE,LINELEN)
0125    400        IF (GETMARLIN().NE..TRUE.) GOTO 2000
0126               CALL PUTLINE(LINE,LINELEN)
0127               IF (UNBLNK().NE.'>') GOTO 400
0128               RETURN
0129            END IF
0130            KNOWNVAL=1
0131            STARTVAL=NUM
0132    500     IF (UNBLNK().NE.',') GOTO 2000
0133            COL=COL+1
0134            INCRVAL=1
0135            IF (GETNUM(0)) INCRVAL=NUM
0136            IF (UNBLNK().NE.',') GOTO 2000
0137            COL=COL+1
0138            IF (UNBLNK().NE.'<') GOTO 2000
0139            COL=COL+1
0140            IF (UNBLNK().NE.'-') GOTO 2000
0141            COL=COL+1
0142            IF (UNBLNK().EQ.';') GOTO 750
0143    2000    CALL ERRORF(1,SYNTAX)
0144    700     IF (GETMARLIN().NE..TRUE.) GOTO 1500
0145            IF (UNBLNK().EQ.'>') GOTO 1600
0146            IF (UNBLNK().EQ.'-') THEN
0147               COL=COL+1
0148               IF (UNBLNK().NE.';') GOTO 2000
0149    750        IF (COL.GE.LINELEN) GOTO 700
0150               LINE(LINELEN+1)=0
0151               CALL CONCAT(LINE(COL),TAB5,EQULINE)
0152               CALL PUTLINE(EQULINE,LENGTH(EQULIN_))
0153               GOTO 700
0154            ENDIF
0155            IF (UNBLNK().NE.'<') GOTO 2000
0156            COL=COL+1
0157            IF (GETIDENT().NE..TRUE.) GOTO 2000
0158            IF (UNBLNK().NE.',') GOTO 900
```

```
0159            COL=COL+1
0160            IF .GETNUM(1)) THEN
0161              BINVAL=NUM
0162              GOTO 950
0163            ENDIF
0164    C
0165    C COME HERE IF EQUATE VALUE IS NOT CALCUABLE- THIS CAN BE CAUSED BY THE USE
0166    C OF SYMBOLS IN THE VALUE EXPRESSION OR THE USE OF CONTINUATION LINES IN THE
0167    C VALUE EXPRESSION
0168    C
0169    C NOW WE CAN ATTEMPT TO FIND THE END OF THIS EXPRESSION BY PAIRING '<' AND '>'
0170    C
0171            OPENCNT=0
0172            OUTFLG=0
0173    800     BEGCOL=COL
0174            DO 850 COL=COL,132
0175            IF (UNBLNK().EQ.'<') THEN
0176              OPENCNT=OPENCNT+1
0177              GOTO 850
0178            ENDIF
0179            IF (UNBLNK().EQ.'>') THEN
0180              OPENCNT=OPENCNT-1
0181              IF (OPENCNT.EQ.-1) GOTO 875
0182              GOTO 850
0183            ENDIF
0184            IF (UNBLNK().EQ.';') THEN
0185              IF (OUTFLG.EQ.0) THEN
0186                CALL CONCAT(NAME,PREFIX,EQULINE)
0187                CALL CONCAT(EQULINE,' $EQU  ',EQULINE)
0188                CALL CONCAT(TAB5(5),EQULINE,EQULINE)
0189                LINE(LINELEN+1)=0
0190                CALL CONCAT(LINE(BEGCOL),EQULINE,EQULINE)
0191                CALL PUTLINE(EQULINE,LENGTH(EQULINE))
0192                OUTFLG=1
0193              ELSE
0194                CALL PUTLINE(LINE,LINELEN)
0195              ENDIF
0196              IF (GETMARLIN().NE..TRUE.) GOTO 1500
0197              GOTO 800
0198            ENDIF
0199    850     CONTINUE
0200            GOTO 2000
0201    875     ENDCOL=COL
0202            COL=COL+1
0203            IF (UNBLNK().NE.'-') GOTO 2000
0204            COL=COL+1
0205            IF (UNBLNK().NE.';') GOTO 2000
0206            IF (OUTFLG.EQ.0) THEN
0207              CALL CONCAT(NAME,PREFIX,EQULINE)
0208              CALL CONCAT(EQULINE,' $EQU    ',EQULINE)
0209              CALL CONCAT(TAB5(5),EQULINE,EQULINE)
0210            ELSE
0211              EQULINE(1)=0
0212            ENDIF
0213            LINE(ENDCOL)=0
0214            CALL CONCAT(LINE(BEGCOL),EQULINE,EQULINE)
0215            LINE(LINELEN+1)=0
```

```
0216              IF (COL.LT.LINELEN) THEN
0217                 CALL CONCAT(TAB5(5),EQULINE,EQULINE)
0218                 CALL CONCAT(LINE(COL),EQULINE,EQULINE)
0219              ENDIF
0220              CALL PUTLINE(EQULINE,LENGTH(EQULINE))
0221              GOTO 700
0222
0223     900      BINVAL=STARTVAL
0 _4              STARTVAL=STARTVAL+INCRVAL
0225     950      IF (UNBLNK().NE.'>') GOTO 2000
0226              COL=COL+1
0227              IF (UNBLNK().NE.'-') GOTO 2000
0228              COL=COL+1
0229              IF (UNBLNK().NE.';') GOTO 2000
0230              CALL CONCAT(NAME,PREFIX,EQULINE)
0231              CALL CONCAT(EQULINE,' $EQU      ',EQULINE)
0232              CALL CONCAT(TAB5(5),EQULINE,EQULINE)
0233              CALL MAKENUM(BINVAL)
0234              CALL CONCAT(NUMSTR,EQULINE,EQULINE)
0235              LINE(LINELEN+1)=0
0236              IF (COL.LT.LINELEN) THEN
0237                 CALL CONCAT(TAB5(4),EQULINE,EQULINE)
0238                 CALL CONCAT(LINE(COL),EQULINE,EQULINE)
0239              ENDIF
0240              CALL PUTLINE(EQULINE,LENGTH(EQULINE))
0241              GOTO 700
0242
0243     1500     CALL ERRORF(5,NOCLOSEANGLE)
0244     1600     RETURN
0245              END
```

PROGRAM SECTIONS

	Name	Bytes	Attributes
0	$CODE	1168	PIC CON REL LCL SHR EXE RD NOWRT LONG
1	$PDATA	24	PIC CON REL LCL SHR NOEXE RD NOWRT LONG
2	$LOCAL	464	PIC CON REL LCL NOSHR NOEXE RD WRT LONG
3	TEXT	431	PIC OVR REL GBL SHR NOEXE RD WRT LONG
4	VARS	12	PIC OVR REL GBL SHR NOEXE RD WRT LONG
5	LOG	30	PIC OVR REL GBL SHR NOEXE RD WRT LONG
6	STGS	586	PIC OVR REL GBL SHR NOEXE RD WRT LONG
7	MORSTG	4	PIC OVR REL GBL SHR NOEXE RD WRT LONG
8	CHECKS	2	PIC OVR REL GBL SHR NOEXE RD WRT LONG
9	PARSE	2160	PIC OVR REL GBL SHR NOEXE RD WRT LONG
10	FILES	654	PIC OVR REL GBL SHR NOEXE RD WRT LONG
11	SPCHR	6	PIC OVR REL GBL SHR NOEXE RD WRT LONG
12	LUNS	14	PIC OVR REL GBL SHR NOEXE RD WRT LONG
	Total Space Allocated	5555	

ENTRY POINTS

Address	Type	Name
0-00000000		EQULSTF

VARIABLES

Address	Type	Name	Address	Type	Name	Address	Type	Name	Address	Type	Name
2-000000B2	I*2	BEGCOL	4-00000006	I*4	BINVAL	11-00000000	I*2	BLANK	9-00000212	I*2	BLBITS
9-00000332	I*2	BLFOFS	12-00000002	I*2	BLI	10-0000028C	I*2	BLIPTR	5-00000012	L*2	BLKOUT
9-0000012A	I*2	BOFSET	9-0000016C	I*2	CBASE	9-0000016E	I*2	CINCR	4-00000004	I*2	COL
5-00000016	L*2	CONEXP	8-00000000	I*2	DEBUG	2-000000B4	I*2	ENDCOL	5-00000014	L*2	ENDEXP
5-00000000	L*2	ENDFIL	11-00000004	I*2	EOLCH	12-00000008	I*2	ERR	5-00000002	L*2	ERROR
5-0000000E	L*2	ERROUT	5-00000010	L*2	FLDLAS	9-00000122	I*2	FOFSET	9-000000B6	I*2	FSIGN
9-000000B4	I*2	FSIZ	2-000000BC	I*4	INCRVAL	12-00000000	I*2	INP	10-000000A8	I*2	INPLIN
10-000000A6	I*2	INPTR	2-000000AA	I*2	KNOWNVAL	9-0000051C	I*2	LASLIN	9-00000216	I*2	LFDSIZ
4-0000000A	I*2	LINELEN	9-00000126	I*2	LINTYP	9-00000218	I*2	LPTR	9-00000214	I*2	LSBSIZ
12-00000004	I*2	MAR	10-0000019A	I*2	MARPTR	12-0000000C	I*2	MAS	9-0000086E	I*2	MNGCNT
9-0000086C	I*2	NEGCNT	2-000000B6	I*2	NOCLOSEANGLE	4-00000000	I*4	NUM	9-00000334	I*2	OBBITS
9-0000032E	I*2	OFSIZ	2-000000AE	I*2	OPENCNT	9-00000330	I*2	OUNSIZ	2-000000B0	I*2	OUTFLG
5-00000018	L*2	POSOFF	5-0000000C	L*2	SMASK	9-00000120	I*2	SOFSET	2-000000B8	I*4	STARTVAL
5-00000004	L*2	STGEQL	5-00000006	L*2	STROK	2-000000AC	I*2	SYNTAX	11-00000002	I*2	TAB
12-00000006	I*2	TMP	5-0000001C	L*2	TMPIN	5-0000001A	L*2	TMPOUT	9-00000050	I*2	TOKTYP
12-0000000A	I*2	TTY	5-00000008	L*2	UNDOK	9-000000B2	I*2	UNISIZ	5-0000000A	L*2	VMASK
9-00000124	I*2	VOFSET	9-00000128	I*2	VSIZ						

ARRAYS

Address	Type	Name	Bytes	Dimensions
6-000000DA	I*2	AMASK	4	(2)
6-00000196	I*2	ASIGN	4	(2)
9-0000051E	I*2	BLBASE	162	(81)
10-0000019C	I*2	BLIBUF	240	(120)
9-00000662	I*2	BLINCR	162	(81)
6-0000017E	I*2	BLSSIZ	20	(10)
9-000003D8	I*2	BVALUE	162	(81)
6-000000EA	I*2	BYTSIZ	20	(10)
6-000001B4	I*2	COMGBL	12	(6)
6-000000C4	I*2	COMMAS	4	(2)
6-00000112	I*2	CONBAS	20	(10)
6-00000126	I*2	CONINC	20	(10)
9-0000012C	I*2	CONPRE	32	(16)
9-0000014C	I*2	CONTAG	32	(16)
9-000007A6	I*2	CONTEX	198	(9, 11)
6-000001D6	I*2	CPAREN	4	(2)
6-000001D0	I*2	CPRCOM	6	(3)
9-00000170	I*2	CVALUE	162	(81)
6-0000004C	I*2	DEFEND	20	(10)
6-00000022	I*2	DEFINI	20	(10)
6-000001DE	I*2	DOLBIT	26	(13)
6-000001F8	I*2	DOLBYT	28	(14)
6-00000036	I*2	DOLDEF	12	(6)
6-00000214	I*2	DOLFLD	24	(12)
6-00000016	I*2	DOLGBL	12	(6)
6-00000234	I*2	DOLLAR	4	(2)
6-00000090	I*2	DOLVLD	18	(9)
6-000000DE	I*2	DOTBLK	12	(6)
6-00000042	I*2	DOTEQS	10	(5)
6-00000000	I*2	DOTMAC	22	(11)
6-00000060	I*2	ENDMAC	18	(9)
2-00000006	L*1	EQULINE	132	(132)
6-000000B2	I*2	EQULST	18	(9)
6-00000102	I*2	EQUTAB	12	(6)
6-0000007E	I*2	EXCLSP	14	(7)
6-00000230	I*2	EXPCLO	4	(2)
6-0000022C	I*2	EXPOPN	4	(2)
9-000000B8	I*2	FLDNAM	72	(36)
6-000001B0	I*2	HYPHEN	4	(2)
10-00000000	I*2	INBUF	166	(83)
6-000000C8	I*2	LANHYP	6	(3)
3-00000000	L*1	LINE	133	(133)
6-0000013A	I*2	LITTAB	18	(9)
6-0000015A	I*2	MACTAB	16	(8)
10-000000AA	I*2	MARBUF	240	(120)
9-000005C0	I*2	MRBASE	162	(81)
9-00000704	I*2	MRINCR	162	(81)
9-00000336	I*2	MVALUE	162	(81)
3-0000010A	L*1	NAME	32	(32)
7-00000000	I*2	NEGSGN	4	(2)
3-0000012A	L*1	NUMSTR	133	(133)
6-000001DA	I*2	OASIGN	4	(2)
6-0000016A	I*2	OFFSET	20	(10)

6-000001A2	I*2	ONESHF	6	(3)
6-0000010E	I*2	OPAREN	4	(2)
9-000002CE	I*2	OSBNAM	32	(16)
9-000002EE	I*2	OTGNAM	32	(16)
9-0000030E	I*2	OUNTYP	32	(16)
6-0000019A	I*2	PCTSEM	8	(4)
3-00000085	L*1	PREFIX	133	(133)
9-00000052	I*2	PRENAM	32	(16)
6-000000D4	I*2	RANHYP	6	(3)
9-0000021A	I*2	RSTLIN	180	(90)
2-0000008A	L*1	SAVENAME	32	(32)
6-00000154	I*2	SEMSPC	6	(3)
6-000000FE	I*2	SPCSTG	4	(2)
6-000001A8	I*2	SPHYSP	8	(4)
9-00000092	I*2	STRSTG	32	(16)
6-00000072	I*2	SUFDEF	8	(4)
9-00000072	I*2	SUFNAM	32	(16)
2-00000000	L*1	TAB5	6	(6)
6-0000014C	I*2	TABEQS	8	(4)
6-000000CE	I*2	TABLAN	6	(3)
6-000001CA	I*2	TABOPR	6	(3)
6-000001C0	I*2	TABPRN	10	(5)
6-000000AC	I*2	TABRAN	6	(3)
6-0000008C	I*2	TABSTG	4	(2)
9-00000100	I*2	TAGNAM	32	(16)
9-0000047A	I*2	TMPVAL	162	(81)
9-00000000	I*2	TOKSTG	80	(40)
6-00000238	I*2	UNDVLD	18	(9)
6-0000007A	I*2	UNITYP	4	(2)
6-00000192	I*2	ZEROSG	4	(2)
6-000000A2	I*2	ZRLAHY	10	(5)

LABELS

Address	Label	Address	Label	Address	Label	Address	Label	Address	Label	Address	Label
0-00000094	400	0-000000C4	500	0-00000133	700	0-00000172	750	0-0000021C	800	0-000002EE	850
0-000002FD	875	0-000003C4	900	0-000003CF	950	0-00000486	1500	0-0000048F	1600	0-0000012B	2000

FUNCTIONS AND SUBROUTINES REFERENCED

Type	Name	Type	Name	Type	Name	Type	Name	Type	Name	Type	Name
	CONCAT		ERRORF	L*1	GETIDENT	L*1	GETMARLIN	L*1	GETNUM	L*1	IDENT
I*2	LENGTH		MAKENUM		MOVNAM		PUTLINE	L*1	UNBLNK		

COMMAND QUALIFIERS

```
  FORTRAN /NOI4/LIS=LIS$:MDL32/OBJ=OBJ$:MDL32 MSRC$:MDL32

  /CHECK=(NOBOUNDS,OVERFLOW,NOUNDERFLOW)
  /DEBUG=(NOSYMBOLS,TRACEBACK)
  /STANDARD=(NOSYNTAX,NOSOURCE_FORM)
  /SHOW=(NOPREPROCESSOR,NOINCLUDE,MAP)
  /F77  /NOG_FLOATING  /NOI4  /OPTIMIZE  /WARNINGS  /NOD_LINES  /NOCROSS_REFERENCE  /NOMACHINE_CODE  /CONTINUATIONS=19
```

COMPILATION STATISTICS

```
  Run Time:            138.40 seconds
  Elapsed Time:        285.71 seconds
  Page Faults:         330
  Dynamic Memory:      288 pages
```

0234 AH-BT13A-SE
VAX/VMS V4.0

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MMGADJWSL
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MIRROR
MAP

MMGTST

MMGADJWSL
MAP

MMGCRTDEL
MAP

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MMGEXPCNT
MAP

MMGNSFWSL
MAP

MMGXQUOTA
MAP

MMGCRDLSP
MAP

MMGCRTFIL
MAP

MMGLKWULW
MAP

MMGSETPRT
MAP